



**Tram Project Board
Report on Period 05 (2010/11)
Papers for meeting 25th August 2010**

09:30am – 12:00pm

Distribution:

Members and attendees

David Mackay (Chair)	Cllr Phil Wheeler	Donald McGougan
Marshall Poulton	Stewart McGarrity	Richard Jeffrey
Bill Campbell	Cllr Allan Jackson	Dave Anderson
Steven Bell	Cllr Gordon Mackenzie	Graeme Bissett
Kenneth Hogg	Brian Cox	Alastair Richards
Cllr Ian Perry	Peter Strachan	Neil Scales
Ian Craig	Mandy Haeburn-Little	Alasdair Sim (Secretary)

In addition – for information only

Cllr Maggie Chapman	Cllr Tom Buchanan	Dennis Murray
Andy Conway	Frank McFadden	Ailie Wilson
Norman Strachan	Alan Coyle	Susan Clark
Iain Coupar	Gregor Roberts	

TRAM PROJECT BOARD

Contents	Page
Agenda Tram Project Board	4
Tram Project Board Minutes 28/07/10.....	6
Project Directors' Report	13
Papers for Consideration Period 05 2010/11	19
Primary Risk Register	23
Period 05 Transport Scotland Report Sections 2-7	26

Agenda Tram Project Board
Brunel Suite – Citypoint, 2nd Floor
25th August 2010 – 09.30am to 12.00pm

Attendees:

David Mackay (Chair)	Cllr Phil Wheeler	Dave Anderson
Richard Jeffrey	Cllr Ian Perry	Stewart McGarrity
Bill Campbell	Cllr Allan Jackson	Alastair Richards
Cllr Gordon MacKenzie	Brian Cox	Graeme Bissett
Donald McGougan	Neil Scales	Mandy Haeburn-Little
Steven Bell	Kenneth Hogg	Andy Conway
Marshall Poulton	Peter Strachan	Alasdair Sim (Minutes)

Apologies:

- 1 Review of Previous Minutes and Matters Arising (DJM)
- 2 5 Key Business Priorities (RJ)
 - 2.1 Building the Tram
 - Update on Progress with BSC (RJ)
 - Project Director Progress Report Period 05 (SB)
 - Change Requests & Risk Drawdown
 - 2.2 Preparing for Operations (AR)
 - 2.3 Building the Brand (MHL)
 - 2.4 Building the Team (RJ)
 - 2.5 Preparing for the Future (RJ)
- 3 AOB
- 4 Date of next meeting – 22 September 2010

Tram Project Board Glossary of Terms

APA	Asset Protection Agreement	MUDFA	Multi Utilities Diversion Framework Agreement
AFR	Accident Frequency Rate	NPF	National Planning Framework
BCR	Benefit to Cost Ratio	NPV	Net Present Value
BROR	Benefits Realisation & Operational Readiness Committee	NR	Network Rail
BSC	Bilfinger Berger, Siemens and CAF	NTS	National Transport Strategy
CCTV	Closed Circuit Television	OCIP	Owner Controlled Insurance Programme
CEC	The City of Edinburgh Council	OGC	Office of Government Commerce
COCP	Code of Construction Practice	OJEU	Official Journal of the European Union
DFBC	Draft Final Business Case	OLE	Overhead Line Equipment
DPOFA	Development Partnering & Operating Franchise Agreement	PFI	Private Finance Initiative
DRP	Dispute Resolution Process	PIN	Preliminary Information Notice
DV	Valuation Office Agency	PMP	Project Management Plan
EARL	Edinburgh Airport Rail Link	QRA	Quantitative Risk Analysis
ER	Employers Requirements	RBS	Royal Bank of Scotland
ETL	Edinburgh Trams Limited	REV	Revision
ETN	Edinburgh Tram Network	RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
ETP	Edinburgh Tram Project	ROGS	Railway and Other Guided Transport Systems (Safety) Regulations
FATS	Factory Acceptance Test	RPI	Retail Price Index
FBC	Final Business Case	RTS	Regional Transport Strategy
FOISA	Freedom of Information (Scotland) Act	SATS	Site Acceptance Test
FoTW	Foot of the Walk	SCADA	Supervisory Control and Data Acquisition
GMP	Guaranteed Maximum Price	SDS	Systems Design Services contractor
GVD	General Vesting Declaration	SE	Scottish Executive
H&S	Health and Safety	SESTRAN	South East of Scotland Transport Partnership
HSQE	Health, Safety, Quality & Environment	SNH	Scottish Natural Heritage
HMRI	Her Majesty's Rail Inspectorate	SP	Scottish Power
HR	Human Resources	SPOKES	Lothian Cycle Campaign
IDC	Inter-Disciplinary Checks	SRO	Senior Responsible Owner
ICP	Independent Competent Person	SRU	Scotland Rugby Union
Infraco	Infrastructure Contract	STAG	Scottish Transport Appraisal Guidance
ICT	Information Communications & Technology	SUCs	Statutory Utility Companies
ITN	Invitation to Negotiate	SW	Scottish Water
ITPs	Implementation Test Plans	TEL	Transport Edinburgh Limited
ITT	Invitation to Tender	TENS	Trans-European Transport Network Executive Agency
JRC	Joint Revenue Committee r	TPB	Tram Project Board
KPI	Key Performance Indicator	TRO	Traffic Regulation Order
LB	Lothian Buses	TTRO	Temporary Traffic Regulation Order
LLAU	Limits of Land to be Acquired or Used	Tramco	Tram Vehicle Supply and Maintenance Contract
LOD	Limits of Deviation	TS	Transport Scotland
LRT	Light Rapid Transit	TSS	Technical Support Services contract
LRV	Light Rail Vehicle	UTC	Urban Traffic Controls
LTS	Local Transport Strategy	VAT	Value Added Tax
MP	Member of Parliament	VFM	Value For Money
MSP	Member of Scottish Parliament		

Edinburgh Tram Network Minutes

STRICTLY PRIVATE AND CONFIDENTIAL

Tram Project Board

28th July 2010 (09:30 to 12.10)

tie offices – Citypoint II, Brunel Suite

Members in Attendance:			
David Mackay	DJM	Bill Campbell	WWC
Richard Jeffrey	RJ	Donald McGougan	DMcG
Cllr Gordon MacKenzie	GM		
In Attendance:			
Brian Cox	BC	Andy Conway	AC
Graeme Bissett	GB	Kenneth Hogg	KH
Alastair Richards	AR	Cllr Phil Wheeler	PW
Peter Strachan (telecon)	PS	Cllr Allan Jackson	AJ
Dave Anderson	DA	Cllr Ian Perry	IP
Marshall Poulton	MP	Ian Craig	IC
Susan Clark	SC	Mandy Haeburn-Little	MHL
Gregor Roberts	GR	Alasdair Sim (minutes)	AS
		Duncan Fraser (Part Time)	DF

Apologies:

Steven Bell, Stewart McGarrity, Neil Scales, Cllr Tom Buchanan

1.0	Introduction, Review of Previous Minutes and Matters Arising	
1.1	DJM welcomed the participants to the meeting and noted the apologies.	
1.2	<p><u>Matters Arising from Previous Minutes</u></p> <p>Action Item 2.2 : GR and A Coyle to discuss the structure of the Business Case Refresh and follow up with Elected members.</p> <p>Action Item 2.3 : RJ confirmed that the Gogar Intermodal Station actions had been closed out and that these matters would be raised with the Cabinet Secretary for Finance and Sustainable Growth at his meeting on 28/7/10.</p> <p>Action Item 3.5 : Action closed.</p> <p>Action Item 4.2 : MHL confirmed that she had been on a visit to Liverpool, and WWC to arrange a follow up visit to the combined Control Centre.</p> <p>Action Item 8.1 : DJM confirmed that he was meeting with the Council Chief Executive on 28/07/10 to discuss governance matters.</p> <p>All other actions identified in the previous TPB minutes have been closed out.</p>	

1.3	IP asked that the minutes be updated to reflect his previously reported standing conflict of interest position. This was noted by the Board.	Note
1.4	The minutes of the TPB from 30 June 2010 were accepted as an accurate record.	
1.5	DJM asked the TPB to declare and confirm any new conflicts of interest; there being none, he went on to emphasise the absolute requirement for strict adherence to commercial confidentiality, both in regard to the specific matters discussed and to papers referred to in the meeting.	
1.6	DJM in his opening remarks noted that engagement with BSC since the last Board meeting had been more positive than in previous periods, and that a number of Senior meetings have been arranged.	
2.0	Chief Executive's Update	
2.1	RJ concurred with DJM's remarks, and noted that whilst much work has been undertaken, there remains much still to be done. He reminded the Board of the workstreams being progressed: <ul style="list-style-type: none"> ▪ Workstream A – Termination; ▪ Workstream B – Where BSC complete part of the project and tie re-procure the remainder on an incremental basis; ▪ Workstream C - Tram Business Case : requirement to submit to Full Council meeting 16th September 2010. 	
2.2	<u>Workstream A</u> RJ reported that consultation was undertaken with Senior Counsel on 8th July 2010, and informed the Board that tie is in a position to progress to Remedial Termination Notice issue. The timing and decision to do so was discussed in some detail by the Board. The Board endorsed RJ's recommendation in this regard. DMcG requested that it will be necessary to prepare estimates for the costs associated with Termination, and RJ confirmed that this was underway.	RJ
2.3	<u>Workstream B</u> RJ reported on progress and noted that whilst positive conversations had been taking place with BSC, he remains cautious until negotiations progress further. There are key deliverables awaited from BSC, these are: <ul style="list-style-type: none"> ▪ Assured Design promised by mid July 2010, and although this has yet to be delivered, evidence of its existence has been witnessed, and; ▪ The Guaranteed Maximum Price (GMP) which is scheduled for submission by BSC at the end of July. BSC have confirmed that the design is sufficiently progressed to allow a fixed price to be established. RJ noted that a period of time will be required to analyse the detail and make recommendations to the TPB. DA confirmed that sufficient CEC resource will be applied to outstanding technical and planning approval processes to conclude these matters and	

	<p>remove potential blockers.</p> <p>RJ confirmed that a team is in place to review the GMP when received and that best value will be the key criteria in this assessment, noting that it may be necessary to work through the detail with BSC to understand the composition of the pricing proposal.</p> <p>The strategy to progress this workstream was discussed at length with broad participation from the Board with a key factor being recognised that there is a finite time during which clarity on price, programme and delivery must be realised. The Board endorsed RJ's recommendations and authorised him to proceed with the agreed strategy.</p> <p>DJM confirmed that the Board members will be kept informed as each step progresses through the next week and beyond.</p>	
2.4	<p><u>Workstream C</u></p> <p>As noted at the previous TPB, the Council requested an updated Business Case to be submitted for consideration at the Council meeting on 16th September 2010. Work is underway and the scope has been agreed in line with the previous TPB recommendations with CEC, TEL and tie. The results of this will be presented to the TPB on 25th August 2008, and thereafter to the TEL and LB Boards respectively.</p>	
2.5	<p><u>DRP Update</u></p> <p>RJ updated the Board on the Dispute Resolution Procedures at Period 4, noting that 15 items have been referred to DRP - 11 referred by tie and 4 by BSC. To date 3 have been resolved by negotiation & 3 resolved through mediation - 7 decisions have been made by Adjudication.</p> <p>He reported the recent adjudication concerning the impacts on BSC arising from the MUDFA Rev 8 programme, and noted that the decision found substantially in tie's favour. It was noted that under the terms of the Contract tie is bound by commercial confidentiality on public release of the details of DRP matters. The Board expressed their appreciation to the team who had worked extremely diligently in preparing and presenting this case to the Adjudicator. It was noted that two further adjudication decisions are due in August, these concerning the Depot Access Bridge and a legal decision on the application of Clause 80.13.</p>	
2.6	<p><u>Change Register Update</u></p> <p>RJ reported on the current status from the change register, noting that the value of agreed changes is £18.242m compared to the original submission for those same items of £33.241m, representing an 82% reduction in value through rigorous challenge of received estimates.</p>	
3.0	Building the Tram	
3.1	<p>SC presented the progress updates for Period 4.</p> <p><u>HSQE – Deliver a Tram Safely</u></p> <p>There have been no reportable accidents during Period 4. The rolling 13 period AFR is being maintained at 0.12, well below the target of 0.24 for the project, although a Reportable accident occurred at the Depot (overturned dumper) on</p>	

<p>20/07/10. There have been no service strikes in Period 4. Two environmental incidents reported during Period 4; Lindsay Road (concrete spillage); oil leak at Tower Place Bridge, both matters dealt with in accordance with protocols.</p> <p><u>HSQE – Deliver a Safe Tram</u> Four inspections were carried out during period – Carrick Knowe Bridge; Lindsay Road, Depot and Murrayfield Wanderers. The metrics for Period 4 have remained consistent with no noticeable variations. After further joint inspection with CEC, a list of hazards and remedial works with appropriate timescales has been agreed with CEC for Princes Street defects. Audit TQA-BSC-04-2010 was carried out on 8th July 2010 on the Guided Busway ITPs. Findings agreed and formally issued to BSC. 4 minor and 2 observations – Siemens were found to be co-operative throughout and could demonstrate that records are being collated. 5 Site Supervisors Quality Inspections carried out during Period 4. Early indications are positive with site operative competency and site supervision achieving good observational results.</p> <p><u>Code of Construction Practice</u> Compliance on COCP has increased slightly to 94% in Period 4. Some items remain open for improvement and these are being addressed with the implementation of action plans with the relevant contractor.</p> <p><u>Utilities</u> Utility Diversions are complete at Haymarket, with diversion works scheduled for completion on York Place by 30/07/10. Utility Diversions between Newhaven and Victoria Dock Bridge completed in Period 4 (except minor snagging works) & Telcoms cabling works ongoing at localised manholes.</p> <p><u>Embargo Preparations</u> SB reported that Rubber Kerbing & Guardrail reinstatement works have been completed in Haymarket area and West End Junction. It was noted that some congestion was experienced during part of these reinstatements at Princes Street/Lothian Road and SC apologised for any inconvenience caused. A lessons learned session had been undertaken to understand the factors contributing to this. Works in Charlotte and St Andrew Sq scheduled for completion first week in August and London Road to FoTW reinstatement works scheduled for completion 30/07/10. No further works are to be undertaken in the Embargo period.</p> <p><u>Infraco - Progress</u> The progress achieved in the Period for INFRACO works was 1.3% against a plan of 3.2% . BSC worked more hours in the period than normal which seems to suggest a lower productivity rate for the period. The total cumulative completion is 20.5% in Period 4.</p> <p>Issues raised in Period 4:</p> <ul style="list-style-type: none"> ▪ Progress to various areas not taking place due to lack of engagement of

	<p>Contractor following Issue of Instruction – Clause 80/Clause 34.1;</p> <ul style="list-style-type: none"> Contractors failure to comply with contractual requirements surrounding Permit To Commence having effect on progress of the works in various locations. Information being reviewed weekly; Further design slippage; <p>It was reiterated that CEC members and the Scottish Parliament (MSPs) are to be invited to attend organised site visits to assess progress (prior to September). MHL to arrange.</p>	MHL
3.2	<p><u>Change Requests and Risk Drawdown</u></p> <p>SC reported There were six risk reviews held in the period. There were two draw-downs on the risk allowance approved in the period totalling £673,814. Based upon the revised project risk allowance this leaves a risk balance of £3,547,588. Draw downs to the end of Period 4 10/11 now total £44,771,601. The remaining risk balance based on the approved QRA plus the additional funding is £3,547,588. The Board approved the Period 4 drawdown.</p>	
3.3	<p><u>Traffic Regulation Orders</u></p> <p>DF presented an overview of the changes to traffic and kerbside operations as a result of TRO1, currently scheduled for consideration by Council on 21st September. The presentation was considered to be very helpful; the video clips in particular and stimulated a good deal of debate on the detail. AJ suggested that a similar presentation be arranged for Members prior to the September meeting. MP to liaise with tie as necessary.</p>	MP
4.0	Preparing for Operations	
4.1	<p><u>Tram Progress</u></p> <p>AR reported that all 27 trams now completed or in production with trams 13, 14,15,16, 17 and 18 all in the finishing area. The 13th tram is now undergoing factory acceptance testing. Trams 3 to 12 are completed and stored ready for delivery at the factory. It was noted that CAF have scheduled to free up this storage space in Spain from the end of August 2010, and plan to commence shipment to Edinburgh. To date, 57,000 visitors to the tram on Princes Street still largely positive feedback.</p>	
4.2	<p><u>Operational Readiness</u></p> <p>AR reported that Construction works at the depot are 49% complete and that building fit-out is progressing well (scheduled for completion end November 2010). External track works are underway, but at a slower rate of productivity than expected. This is putting the tram delivery schedule at risk, and is therefore critical.</p> <p>AR to raise tie/TEL concerns regarding internal consortium issues/blockers formally with BSC.</p> <p>A series of key operational decisions will be made over the next months, these are:</p> <p><i>July</i></p> <ul style="list-style-type: none"> Ticket equipment supply draft tender submissions received; 	AR

	<ul style="list-style-type: none"> ▪ Power supply contract award and available at Depot; ▪ Co-located control room strategy agreed; <p><i>August</i></p> <ul style="list-style-type: none"> ▪ Organisation and terms and conditions agreed; ▪ Relocation of tram from Princes Street; ▪ Engagement of Lloyds Register Rail to audit preparations for operation. <p><i>September</i></p> <ul style="list-style-type: none"> ▪ Scheduled 2nd Delivery of tram from factory. 	
5.0	Building the Brand	
5.1	<p><u>Press, Media and Communications</u></p> <p>MHL noting recent radio/TV interviews with GM and RJ in particular. An update on communications with the Information Commissioner was provided and it was noted that two recent FOISA appeals had been overturned in tie's favour.</p>	
5.2	<p><u>Integration Planning and TEL</u></p> <p>MHL and IC reported on the ongoing integration planning process within Lothian Buses, noting that an encouraging start had been made and that the TPB will be updated as this process proceeds. IC noted that Lothian Buses were set to appear at a Public Inquiry before the Traffic Commissioner on reliability and punctuality performance, and further noted that submissions have been lodged with the Competition Committee with the initial recommendations expected in December 2010.</p>	
5.3	<p><u>Branding</u></p> <p>MHL presented a series of photographs for the recently installed branding signage on Princes Street, noting the involvement of a wide range of agencies & organisations in this combined marketing campaign for Edinburgh. DA endorsed this process and MHL noted a wide range of benefits arising from this and other similar ongoing initiatives, including:</p> <ul style="list-style-type: none"> ▪ Google online support across the City ▪ Business Hub to be carried by libraries ▪ Business Support Grants from the East of Scotland Development Fund ▪ Training via Business Gateway ▪ Graffiti Cleanup ▪ Marketing and Website advice ▪ City Ambassadors to business ▪ Economic spend data ▪ Business mentoring ▪ Retail input to campaigns <p>The objectives being to improve market share for the City, to improve business performance across City and to improve stakeholder communication.</p>	
5.4	<p><u>Supporting the Community</u></p> <p>MHL updated the Board on the ongoing work to complete the Vine Trust barge, which is berthed at Prince of Wales Dock, Leith. Edinburgh Trams is one of the principal supporters of this initiative, and it is hoped that the Tram Mock Up</p>	

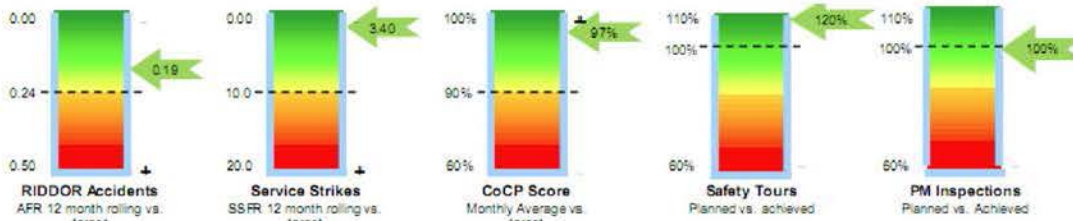
	could be moved to this site when the works are completed.	
6.0	Building The Team	
6.1	RJ reported that work is progressing in this areas, and that tie has entered the 'Great Place to Work' initiative, and that the results of this survey would be used for benchmarking purposes.	
7.0	Preparing for the Future	
7.1	RJ reported that conclusion to governance matters is critical, and work is ongoing to develop a combined organisational structure for the TEL entity.	
8.0	Governance	
8.1	DJM noted that a meeting with the Council Chief Executive is scheduled for the afternoon of 28 July 2010 to progress governance matters.	DJM
9.0	AOB	
9.1	SC noted TENS funding to the tune of 2m euro had previously been available to the EARL project. Prior to cancellation of the project, 1m euro had been delivered, and following a recent tie submission to Brussels the balance (1m euro) has now been secured following confirmation that the work allocated to this funding had been completed. These monies to be returned to Transport Scotland.	
9.2	PW requested that the TPB Glossary be updated on a regular basis as new acronyms come into use.	MHL
10.0	Date of Next Meeting	
10.1	DJM thanked the Board for their participation and confirmed that the date of the next meeting will be Wednesday 25th August 2010 commencing at 09:30hrs .	
10.2	The meeting closed at 12.10.	

Prepared by Alasdair Sim, 30th July 2010

Building The Tram Project Director Report - Period 05 [10/11]

Deliver a Tram Safely

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	108,714	0	1	1	15	1	3	0	1	0.92	0.92
13 period rolling	1,590,250	1	2	21	210	54	26	7	35	0.19	3.40



There was one reportable accident during Period 5 involving a dumper overturning at the new tram depot. The dumper driver was treated in hospital for a fractured collar bone. The rolling 13 period AFR is 0.19, still below the target of 0.24 for the project. Following this incident **tie** have reviewed the investigation findings supplied by BSC. It was concluded by **tie** that the investigation had not fully identified the underlying causes of the incident. A meeting took place on 5th August at which BSC undertook to further investigate aspects of the incident and resubmit the investigation report.

An Operative and a Machine Operator working for BSC (Barr) were removed from site at the depot after BSC witnessed an operative standing in the bucket of the machine at height. This subcontractors' performance is being reviewed weekly by BSC and Barr.

The service strike frequency rate across the project still continues on a downward trend. There has been a decrease in reported Member of Pubic incidents. CoCP compliance has increased slightly from 95% to 97% this period. There have been 100% of the planned PM inspections (9) carried out during Period 5 and 120% (6) of planned safety tours.

Environment

3 environmental incidents during Period 5. One at section 7 – Diesel Spill (BSC) and two at Gogar depot – Hydraulic oil leak (BSC) and overfilled generator/diesel spill (Siemens/BAM). All actioned in accordance with procedures.

Deliver a Safe Tram

Section	Activity	Data Checked				
		IDC	ITP's	Design Variation/Change	As Built's	Asset Register
A8 Underpass	Excavation & Piling	0.5	1	1	1	N/A
Lindsay Road	Retaining Wall	0.5	1	1	1	N/A
Depot	Building Fit Out	0.5	1	1	1	N/A
Section 7 Farrans	Track Works/Earthworks	0.5	0.5	1	1	N/A
PD	Total (y)	2	3.5	4	4	N/A
	Max Possible Total (y)	4	4	4	4	N/A
Total	Percentage P4	43%	91%	83%	76%	50%
	Percentage P5	44%	90%	84%	78%	50%

Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)

Four inspections carried out during period – A8 Underpass; Lindsay Road, Depot and Section 7 & Farrans. Slight improvements were noted in the IDC and As Built metrics checks.

Progress

The progress achieved in the Period for INFRACO works was 1.8% against a plan of 2.3% this rate of progress is similar to that achieved in recent periods, and reflects the level of activity underway, primarily in the off-street sections. BSC are undertaking very limited on-street works in the Leith Docks area at present.

The total cumulative INFRACO completion is 22.2% at the end of Period 05.

Progress Comparison with Period 4 – Infraco

Period	Cumulative Progress (Actual)	Rev 1 Target
2010/11 Period 04	20.5%	92.4%
2010/11 Period 05	22.2%	94.7%

In this period BSC have reverted to reporting progress against the agreed Rev.1 contractual programme. This shows an OFRS date of 14 July 2013 against the contractual Rev.1 programme date of 06 Sep 11 and reports a 47 day slippage in the 53 day period since the Rev.1 programme was last reported against.

tie continue to monitor progress against the “live” programme which is based on the contractual Rev.1 Programme logic. This indicates a Sectional D completion in February-13, which is a 23 calendar day slippage from Period 4.

The critical path through this programme remains with the road and track works at the top of Leith Walk between Balfour Street and McDonald Road.

Dispute Resolution

During period 5 we received the detailed reasonings behind the MUDFA Rev 8 decision from Mr Howie, QC. A review of this will be held in period 6 to identify any further actions required. Meantime, BSC has submitted their Estimate for the EOT awarded for Sectinoal completion a which is under review by **tie**.

The decision on the Murrayfield (Clause 80.13/34 instructions) DRP was also received. This gave some useful interpretation of these clauses in respect of known Notified Departures which **tie** has reviewed and is issuing further instructions to BSC in respect of this interpretation.

A strategic review of commercial and contractual options is underway and is reported to the Tram Project Board and Transport Scotland each period.

As part of the negotiations, **tie** has continued with the contractually assertive approach to management of the contract. In Period 5 this has included the issue of several contract notices. We await the response from BSC within the timescales set out in the Infraco Contract and CEC have been briefed on this process. Further information on this can be obtained from **tie**'s Project Director.

Design

v60 was submitted to **tie** on 23 July10 with a progress date of 05 July10. In summary:

- IFCs – Phase 1a: 178 issued out of 227 (79%)
- 56 Prior Approvals are included in v60 – 52 of which have been granted – those remaining include the RBS Gogarburn Tramstop, Edinburgh Gateway, Canopy & Boundary Treatment at Airport Kiosk and OLE pole locations (93%)
- 86 Technical Approvals out of 92 have been granted in v60 (88%)

tie has been undertaking an audit on management of design by BSC/SDS. This has been ongoing for a number of weeks now with resistance encountered - contractual correspondence is in place in respect of this matter to try and re-start the audit process.

Utility & Cabling Works

All remaining on-street Utility, remedial & snagging works are on hold until after the Summer Embargo, whilst the tender process for Utility work at Baltic street is on hold until tie receive the required IFC drawings from SDS - which remain outstanding.

BT Cabling on the northbound carriageway of Leith Walk (between Jane St – Foot of the Walk) was completed early in Period 5, whilst the cabling works between MacDonald Rd – Jane St has a forecast completion in September 2010. The required remedial and snagging works in Leith Walk are compounding the delay caused to Infraco on the Northbound carriageway, however the Southbound carriageway is available to BSC.

Tramworks (INFRACO)

INFRACO progress is primarily focussed on the off-street section between Haymarket and the Airport. Progress in Period 5 is summarised as follows:

Period 05 2010-11	Period		Delta	Cumulative		Delta	Project
INFRACO PERIOD 05 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	5.3%	2.8%	-2.5%	88.4%	4.0%	-84.3%	16.2%
Section 1b Foot of the Walk to McDonald Road	9.0%	0.0%	-9.0%	97.7%	1.3%	-96.4%	7.4%
Section 1c McDonald Road to Princes Street West	4.5%	0.0%	-4.5%	80.4%	0.0%	-80.4%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	4.8%	1.1%	-3.7%	90.1%	9.5%	-80.6%	42.0%
Section 2 Haymarket to Roseburn Junction	0.0%	2.5%	2.5%	100.0%	32.0%	-68.0%	4.2%
Section 5a Roseburn Junction to Balgreen Road	2.5%	0.9%	-1.6%	91.9%	6.9%	-85.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.2%	0.2%	100.0%	42.3%	-57.7%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	4.7%	4.7%	100.0%	14.4%	-85.6%	7.2%
Section 6 Gogar Depot	0.0%	5.6%	5.6%	100.0%	55.0%	-45.0%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.9%	0.9%	100.0%	36.5%	-63.5%	7.6%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.6%	2.3%	1.7%	98.0%	31.4%	-66.6%	58.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	2.3%	1.8%	-0.6%	94.7%	22.2%	-72.5%	100.0%

Issues in the Period

- Progress to various areas not taking place due to lack of engagement of Contractor following Issue of Instruction – Clause 80/Clause 34.1;
- Contractor's failure to comply with contractual requirements surrounding Permit To Commence having effect on progress of the works in various locations. Information being reviewed weekly;
- Further design slippage;
- Outstanding Information from Network Rail continues to delay submission for Technical Approval for Gogar Intermodal Station.

Tram Works (TRAMCO)

CAF is progressing well against its contractual programme for delivery of trams to Edinburgh, however whilst the depot continues to progress well it is not yet available to receive the trams.

The first tram delivered (UT2) continues to attract attention on Princes Street with over 74,000 visitors to date providing positive feedback.

Preparing for Operations

We have been planning in detail the first three stages of preparation for the Testing & Commissioning phases as well as the operational introduction of trams. The Benefits Realisation & Operational Readiness Committee was formed and is reporting to the TPB, and an integrated programme has been developed.

The procurement of the ticketing equipment for the tram system, to integrate with the existing Lothian Buses ticketing system has progressed to the stage where we have shortlisted and received and evaluated tender submissions. We expect to select a preferred bidder by November.



Tram Fleet in Storage at CAF Factory



Track Progress at Gogar Dept

Edinburgh Gateway

- Transport Scotland has confirmed that "Scottish Ministers have re-affirmed their requirement that Gogar Interchange is delivered to coincide with completion of the tram project". Further discussions will be held on this matter
- Prior Approval was granted on 28th July 2010.
- **tie** have requested an Estimate from BSC for Edinburgh Gateway construction works as a Change under the Infraco Contract.
- **tie** attended a Construction Staging meeting with Transport Scotland and Network Rail on 13th August 2010 to support the development of a **tie** proposal which will minimise NWR's programme.
- **tie** have identified a potential solution which would be more cost and programme effective and have asked BSC to amend their Estimate for A8 road drainage accordingly.
- **tie** remain concerned that the target completion of October 2010 for completion of legal agreements will not be achieved.
- Network Rail works on diverting the Scottish Power 33kV power cable were due to commence on site in August 2010. To date no work has commenced, nor has any agreement on mobilisation to site been sought by Network Rail. **tie** are concerned at the lack of communication from Transport Scotland and Network Rail in this matter which is effectively on the critical path for the Edinburgh Gateway project. **tie** have previously expressed concerns with the programme for completion of these works and the impact on **tie**'s scope, both on Edinburgh Gateway and

the main Tram Project. This is a matter for Transport Scotland and Network Rail to resolve as tie have no contractual relationship with Network Rail in this matter.

Cost

The 'AFC' (£545m) in this report does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project. Rather, the forecast presented reflects our best view of the spend profile of the funding currently available for the delivery of phase 1a. Given the commercial uncertainties with Infraco and continuing delays to the project it is now considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m.

Until the key issues are resolved through the contractual and legal process, it will not be possible to accurately forecast a revised budget outturn.

Key cost related items to note in Period 5 are:

- COWD to date is £375.7m, with funding to date split to TS (£344.7m) and CEC (£31.0m).
- The budget for ETP in 2010/11, established in April 2010 is £142.2m (£153.3m 09/10). Transport Scotland funding for 2010/11 is £130.5m for ETP, with £11.7m funding available from CEC. See detailed cost report (section 3.1) for an explanation of budget and reforecast differences.
- Full year forecast for 2010/11 has been held at £120.3m in-line with the FOG update. According to the latest forecast the TS share of funding has reduced (-£20.2m) from £130.5m (budget) to £110.3m (Q2 reforecast).
- Key sensitivities to the reforecast are identified in the main report.
- **TIE Ltd presented an updated forecast for 2010/11 and 2011/12 project spend to TS and CEC on 8th July. The presentation was a follow-up action to The Funders Operators Group (Transport Scotland, Edinburgh Council and TIE Limited) action minuted on 17th June 2010.**

Actual YTD P5 & forecast P6-P13 FY10/11

£m	YTD P5	Forecast P6-P13,10/11	Forecast FY10/11
Infrastructure and vehicles	21.8	87.2	108.9
Utilities diversions	-0.3	-4.5	-4.8
Design	0.7	1.3	2.0
Land and compensation	0.3	0.0	0.3
Resources and insurance	5.4	8.4	13.8
Base costs	27.9	92.4	120.3
Risk allowance	0.0	0.0	0.0
Total Phase 1a	27.9	92.4	120.3

- ETP COWD in FY10/11 to Period 5 is £27.9m
- As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.4m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2010/11 and future years.

Risk & Opportunity

There were six risk reviews held in the period. There were nine draw-downs on the risk allowance approved in the period totalling £2,747,583. These are detailed later in the report. Based upon the revised project risk allowance this leaves a risk balance of £800k.

The Project Risk Allowance at financial close was £30,336,196. This was increased in Period 1 by £17,982,993. Drawdowns to the end of Period 5 10/11 now total £47,519,184. The remaining risk balance based on the approved QRA plus the additional funding is £800k.

Drawdown applications on the project risk and contingency allocations in Period 05 were £2,747,583.

Stakeholders & Communications

Press/Media coverage with regards to project and Edinburgh Trams has remained quiet throughout Period 5.

As a result of a Freedom of Information Request the Sunday Herald ran a story on the bonuses and expenses. The article generated further coverage on Monday 9th and Tuesday 10th August in the Scotsman, Evening News and Herald.

The Media Team were approached by the Edinburgh Chambers of Commerce to write a short editorial piece for their Premier Dinner Series on trams as a stimulus for economic growth. This piece will feature in the Chambers of Commerce magazine and website.

Work is continuing on branding and signage projects including the tram mock up, which is currently situated near the airport terminal building, being fully covered in a vinyl wrap on 23rd July to promote this year's festival season. Signage displaying key messages of the project was also successfully installed at the location of the Edinburgh Airport Tram Stop. The same style of signage will be installed on the Broomhouse Road Bridge over the coming weeks.

Ongoing meetings have been taking place between stakeholders in the Haymarket Yards area with our Customer Relations Manager in order to keep them informed of the upcoming traffic diversion around Rosebury House while tram works are carried out along the Haymarket Yards road. The businesses that we regularly meet include Tesco Bank, HM Revenue and Customs, the Institute of Chartered Accountants and Surveyors, Youthlink, Network Rail, COSLA, Halifax-Bank of Scotland and Colliers building managers.

A total of ten Freedom of Information requests were open at the beginning of Period 5, seven of which were new FOI requests while three were with the Scottish Information Commissioner.

The total number of enquiries logged by the Customer Service team has dropped by 24 during Period 5 in comparison to Period 4 where 291 contacts were recorded. Period end totals have continued to fluctuate between 300 and 260 consistently over the past four months. A comparison of weekly totals between Period 4 and 5 also highlights an emerging steady trend in low totals around 70 each week.

Period 05 2010/11 – Papers for Consideration

Paper to: TPB **Meeting date: 25th August 2010**
Subject: Project Change Control Update – Period 05, 2010/11
Preparer: Mark Hamill

Summary

This paper is to update the Tram Project Board with the current status regarding approved project change orders and their implications on the overall Tram Project Budget. To the end of Period 2, £42.1m had been drawn down from the project risk allowance. .

In Period 05, an additional £2.75m has been drawn down leaving a risk allowance of £800k.

Following the delegated authority from TEL to the TPB authorising the use of the £545m funding envelope and the subsequent approval to increase the budget to £530m in Period 13 2009/10, **tie** is now seeking formal approval to increase the budget to £535m. This additional funding of £5m would be added to the Project Risk Allowance.

tie will continue to report on, and ensure that the Board have clear visibility of, all changes which have been authorised and recommended and to seek Board approval for all changes greater than £1m, in line with the Delegated Authority Rules.

Any changes which are approved are in relation to either actual expenditure , a commitment to future expenditure or based upon an anticipated future commitment.

The table below summarises the approved changes that have impacted the Project Risk Allowance in Period 5.

Description	Base cost	Risk	Total
Position at Financial Close (PCB)	481,680,811	30,336,196	512,017,007
Increase in budget		17,982,993	530,000,000
Changes to end Period 4	673,814	-673,814	
Position at end Period 4	526,452,412	3,547,588	530,000,000
Period 05 Changes	2,747,583	-2,747,583	
Position at end Period 5 (CAB)	529,199,995	800,005	530,000,000

Although the following changes have been approved, in most cases the costs have yet to be fully incurred and, while **tie** may have committed to these costs, they have not been paid.

Changes Approved in Period 05

Archaeological works Phase 2 (COP160A - £287,096)

This change is subsequent to the initial archaeological change (Phase 1) which was approved by the Board in Period 7 2009/10. The change is for the increased workscope associated with archaeological works. The figure for Phase 2 also includes works carried out at Gogar during May 2010, namely a watching brief and the compilation of a data structure report. The archaeological works were carried out in advance of the Infraco works to minimise any programme delay.

Section 7 Ground Improvement Works (COP184A - £530,000)

Dealing with soft ground is a Specified Exclusion under 3.3(c) of Schedule Part 4. The original Project Change Order paper (COP 184) was calculated on an estimate of the amount of soft material likely to be encountered based on the geotechnical information available prior to works commencing. During the works it became evident that there was additional soft ground that had to be dealt with and this change is based on the current information.

Section 7 Drainage - (COP243 - £552,845)

This change is due to the design prepared by the SDS provider changing to a greater extent than expected within normal development and completion of the designs as decided at adjudication. This is an estimated amount pending final agreement of the valuation with BSC.

South Gyle Bridge – Sewer Diversion (COP318 - £892,027)

This is a change because the proposed sewer diversion at this location is a transfer from the MUDFA contract to be carried out by a specialist tunnelling contractor under a separate contract. The original SDS design proposed accommodating the existing sewer but proved to have significant implications on South Gyle Access Bridge and the adjoining Bankhead Drive Retaining Wall. It was therefore concluded that the option to divert the existing sewer would be the most suitable. The Board should be aware that this cost has been included in all cost forecasts for the past 12 months as **tie** was aware of the required diversion and, following the award of the contract for this work, the change was formally processed.

Contaminated Ground Russell Road Retaining Wall W4 (COP327 - £397,000)

This is a change following a commercial agreement between BSC and **tie** for the disposal of contaminated land from Russell Road Retaining Wall W4. Contaminated ground is a specified exclusion in accordance with Schedule 4 pricing exclusion item 3.3 (c).

TRO Traffic Model (COP390 - £15,000)

This change is to provide funding for the preparation of movie files and 3D graphics from the VISSIM traffic model suite developed by the JRC Contractor and ALL3D for montages at key locations. This requirement arose following a request by the TPB and CEC to have a simple and clear mechanism to explain what is a complex and radical impact of the tram on-street operations. It is considered that effective communication by way of video clips and 3D photomontages will be of assistance to Council members when voting on TRO 1.

Gogarburn Roundabout Lighting (COP395 - £11,149)

This change arose as a result of CEC requirements for full relighting of the Gogar Roundabout which required some works to be completed outwith the LoD. This value is **tie**'s estimate and is subject to agreement with BSC.

Gogar Landfill Invasive Species (COP396 - £48,377)

Giant hogweed and associated soil had to be removed to allow the surcharge to be placed on the Gogar Landfill. Contaminated material is a specified exclusion under 3.3(c) of Schedule Part 4. This is an estimate pending agreement with BSC.

Tram Promotion Costs (COP400 - £14,089)

This change relates to historical advertising costs which promoted the benefits of the tram system.

Decision(s) / support required

The TPB is requested to:

1. Approve the proposed increase to the Project Control Budget to £535m as requested subject to the reporting and DAR conditions
2. Note the Project Change Control status at Period 5

Proposed

Name: Mark Hamill

Date: 25 August 2010

Title: Risk & Insurance Manager

Recommended

Name: Steven Bell

Date: 25 August 2010

Title: Tram Project Director

Approved

.....Date:
 David Mackay on behalf of the Tram Project Board



Primary risk register

FOISA exempt

Yes
 No

1011 - Period 05 Primary Risk Reg

Printed On: 06 Aug 2010

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
164	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; asbestos found in excavation for utilities diversion; unknown cellars and basements intrude into works area; other physical obstructions; other contaminated land	Unknown or abandoned assets or unforeseen/contaminated ground conditions affect all streetwork sections.	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	F McFadden	High - 25.00	Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
						Conflicts Register	On Programme	On Programme	31-Oct-10	C Neil
						Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	F McFadden
						Trial excavations to confirm locations of Utilities and inform designer. Picardy Place and particularly Broughton St Junction IFC design incompatible with congested utilities.	Complete	Complete	30-May-10	M Blake
172	Area of possible contamination and unstable ground (unlicensed tip) has been highlighted during desk study immediately to east of Goger Burn - investigation for CERT project indicates that this consists of building rubble and domestic waste.	Tramway runs through area of possible contamination and special foundation is required to cope with unstable ground	Increase in costs to provide special foundation solution	C Neil	High - 25.00	Donaldsons provided specialist input	Complete	Complete	30-Jul-09	A Scott
						Include SI Report and Information in next issue of information to Infraco.	Complete	Complete	30-Mar-07	B Dawson
						Monitor design progress and include costs in base estimate.	Complete	Complete	26-Feb-07	A McGregor
						Obtain ground investigation information.	Complete	Complete	9-Feb-07	A McGregor
						Pursue technical solution re design and agree above costs	On Programme	On Programme	30-Oct-10	A Scott
343	General delay to programme with various causes e.g. failure to obtain approvals on time; contractor issues, access after completion of utility diversions	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss.	S Clark	High - 25.00	Access maps showing areas available	On Programme	On Programme	30-Nov-10	F McFadden
						Clause 34 / 80.15	On Programme	On Programme	31-Aug-10	S Bell
						Contractually assertive workstreams to progress programme	On Programme	On Programme	29-May-10	S Bell
						DRP Mudfa Rev 8 response	On Programme	On Programme	31-Aug-10	S Bell
						Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson

1011 - Period 05 Primary Risk Reg

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
952	Scope of works relating to Wide Area Modelling (WAM) have not been agreed with SDS because they consider this to be out with the scope of their contract.	Uncertainty over contractual obligations regarding essential TRO works.	Potential claim from SDS to deal with additional design work; Potential construction costs to deal with WAM issues (difficult to quantify without design) over and above those already included.	A Sim	High - £1.00	Agree design requirements relating to WAM with SDS	Complete	Complete	31-May-07	T Glazebrook
						Employ further traffic management expertise	Complete	Complete	31-Jan-07	C McLauchlan
						Finalise boundaries of Tram responsibility for WAM requirements	Complete	Complete	31-May-07	A Sim
						Obtain design and quantify construction cost for inclusion in base estimate	Complete	Complete	31-Jul-07	T Glazebrook
						Provision of £500k in Draft Final Business Case estimate to deal with WAM requirements	Complete	Complete	31-Jan-07	G Gilbert
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High - £5.00	Continued DRP / Adjudication Process	On Programme	On Programme	31-Jul-10	S Bell
						Contract interpretation and technical expert witness work	On Programme	On Programme	31-Jul-10	S Clark
						Deploy alternative utilities contractors to progress utilities	On Programme	On Programme	30-Nov-10	F McFadden
						Enhanced management focus on various workstreams and options relating to progress of the project	Complete	Complete	31-May-10	Richard Jeffrey
						Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
						Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
						Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
						Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	Complete	Complete	31-Jan-10	S Bell
						PA1 challenge	On Programme	On Programme	31-Aug-10	S Bell
						Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell
Siemens 33 initiative to achieve Airport to Bankhead Drive	On Programme	On Programme	31-Aug-10	S Bell						

1011 - Period 05 Primary Risk Reg

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost and programme delay	F McFadden	High (25.00)	Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
						Extent of soft ground being investigated. External specialist advice deployed.	On Programme	Complete	30-May-10	M Paterson
						Technical challenge against SDS designs	On Programme	On Programme	31-Oct-10	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	Dennis Murray	High (25.00)	Additional resource from T&T	Complete	Complete	29-Jul-09	M Paterson
						Agreed with BSC for independant evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
						All estimates to be scrutinised by tie commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay and other commercial resources on these areas	On Programme	On Programme	30-Dec-10	M Paterson
						Clause 34/80 issues using DRP for disputed values	On Programme	On Programme	31-Aug-10	S Bell
						Enhanced management focus on various workstreams and options relating to progress of the project	On Programme	On Programme	30-May-10	Richard Jeffrey
						Legal challenge to Clause 80 and BSCs interpretation thereof	On Programme	On Programme	31-Jul-10	S Bell
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. (PA 12) Also affects (PA 14)	F McFadden	High (25.00)	All party buy in - application of appendix 7(1)	On Programme	On Programme	31-Dec-11	R Bell
						Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
						Intensive engagement with CEC, palette of options, methodology being agreed	On Programme	On Programme	31-Jul-10	C Neil
						Resolution of trackform at trackform workshop	On Programme	On Programme	31-Aug-10	R Bell
						Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	30-Jul-10	C Neil
						tie developed on-street proposal	On Programme	On Programme	31-Aug-10	S Bell

1011 - Period 05 Primary Risk Reg

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
279		Third party consents including Network Rail consent are denied or delayed	Delay to programme; Risk transfer response by bidders is to return risk to fee; Increased out-turn cost if transferred and also as a result of any delay due to inflation.	R Bell	High - 23/06	Additional EMC modelling to give better info to NR	Complete	Complete	31-Dec-07	C Kerr
						CEC Planning - mock application by SDS	Complete	Complete	31-Dec-07	T Glazebrook
						Draft depot and station change proposals to NR	Complete	Complete	31-Jan-08	A Sim
						Fortnightly meetings of Approvals Task Force	On Programme	On Programme	31-Jul-10	D Sharp
						Identify fallback options	Complete	Complete	31-Aug-07	T Glazebrook
						Increased liaison with 3rd parties	On Programme	On Programme	31-Dec-10	A Sim
						Monitoring and tracking through the 3rd party rep	Complete	Complete	30-Jun-09	D Sharp
						Monitoring of BBS - 12 week look ahead	On Programme	On Programme	14-Jul-11	R Bell
						Obtain critical consents prior to financial close	Complete	Complete	31-Jul-08	T Glazebrook
52	Political and/or Stakeholder objectives change or require design developments that constitute a change of scope; Planning Department requires scope over and above baseline scope in order to give approval (may be as a result of lack of agreement over interpretation of planning legal requirements).	Amendments to design scope from current baseline and functional specification.	Programme delay as a result of re-work; Programme delay due late receipt of change requirements and lack of resolution; Scope/cost creep (dealt with through change process); Project ultimately could become unaffordable.	S Bell	High - 23/06	Change panel process to apply scrutiny to changes	On Programme	On Programme	31-Dec-12	M Hamill
						Close working relationship with CEC and stakeholders.	On Programme	On Programme	31-Jan-11	D Sharp
						Design Task Force	On Programme	On Programme	31-Aug-10	R Bell
						Weekly critical issues meeting	Complete	Complete	31-Jul-08	T Glazebrook
352	Increase in land values	Higher land compensation claims than anticipated	Additional uplift on compensation claims	A Sim	High - 23/06	Close out initiate early negotiations between V and landowners	Complete	Complete	28-Mar-08	A Sim
						Initiate early negotiations between DV and landowners	Complete	Complete	28-Mar-08	A Rintoul
						Liaise with CEC Planning	Complete	Complete	28-Mar-08	R McMaster
134	Network Rail possessions over and above that estimate are required	Compensation paid to Train Operating Companies	Increased compensation paid to Train Operating Companies	G Blythe	High - 23/06	Ensure NR Possession risk is backed off to Infraco	Complete	Complete	29-Jul-07	G Gilbert
						Review Infraco programme to ensure it is robust with respect to NR Possessions	Complete	Complete	29-Aug-07	W Biggins

1011 - Period 05 Primary Risk Reg

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
888	Design, construction and/or testing does not meet Transdev requirements and gain approval from the ROGS Competent Person	ETL refuse to operate system on safety ground or apply overly restrictive procedures that are not directly the responsibility of Infracore (ROGS Competent Person agrees with this)	Delay to commencement of service, additional cost both for delay and rectification of the issue	B Cummins	High (21/0)	Ensure Infracore Agreement requires Operator to be consulted on appropriate issues	Complete	Complete	28-Dec-07	B Dawson
						Involve Transdev fully in design, construction and testing/review process.	On Programme	On Programme	30-Dec-10	A Richards
928	Major single safety incident (including a dangerous occurrence) during construction	Safety incident during construction	Delay (potentially critical) due to HSE F McFadden investigation and rework. PR risk to tie and stakeholders.	B Cummins	High (21/0)	All Site Staff to get CSCS or equivalent	On Programme	On Programme	30-Jan-11	B Cummins
						Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
						HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	B Cummins
						Incident management process regularly updated and revisited	On Programme	On Programme	31-Dec-12	B Cummins
						Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	B Cummins
						Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
						TEL HSE committee overview applied	On Programme	On Programme	31-Dec-10	B Cummins
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redundant utilities; unknown live utilities; unknown redundant utilities.	Unknown or abandoned assets impacts scope of Infracore work	Re-design and delay as investigation. C Neil takes place and solution implemented; Increase in Capex cost as a result of additional works.	C Neil	High (21/0)	Conflicts Register - all on-street sections apart from York Ptc and Broughton St	On Programme	On Programme	31-Aug-10	C Neil
						GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
						Infracore trial holes where applicable.	Complete	On Programme	31-Jan-10	P Dobbin
						MUDFA trial holes to verify GPR surveys	Complete	Complete	30-Jul-09	A Hill
						Obstructions and voids survey, establish ownership reduced delay on discovery.	On Programme	On Programme	31-Dec-10	C Neil

1011 - Period 05 Primary Risk Reg

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
977	Legal challenge. Extension of statutory consultation process. Large number of objections. TRO process is subject to a public hearing process.	Delay in achievement of TRO(s) due to a large number of public objections and/or a legal challenge to using a TTRO to construct Infraco.	Requirement to start construction using TTROs	D Fraser	High - 20/00	Comms strategy to include provision of process and drawings on website for public viewing	Complete	Complete	30-Sep-09	S Clark
						Public deposit commenced 22nd Feb and the formal public consideration phase is underway and will be concluded on 22nd march at which point objections will be dealt with in the form of a formal report to the council for consideration.	On Programme	Complete	30-Jun-10	A Sim
						TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge.	Complete	Complete	31-Oct-09	S Clark
						TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 10	Complete	Complete	21-Sep-09	D Fraser
						Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	On Programme	On Programme	30-Jan-11	A Sim
1104	Design changes following utility diversions	Utilities affected by subsequent kerb realignments (primarily westside of Leith Walk)	Re-diverting of utilities with additional cost and programme delay	C Neil	High - 20/00	Following identification of conflicts potential solution such as protection measures to be identified	On Programme	On Programme	31-Aug-10	C Neil
						Timetable for utility conflicts resolution	On Programme	On Programme	31-Aug-10	C Neil
						Utility conflicts being identified Conflicts Register - all on-street sections apart from York Plc and Broughton St	On Programme	On Programme	30-Aug-10	C Neil
1106	Failure of SDS to provide IFC drawings in line with the V31 programme	Programme delay with dispute over accountability.	Delay to programme and additional costs	R Bell	High - 20/00	Production of concurrency information using Accuts and internal production of PITA database	N/A	On Programme	30-Nov-10	S Clark
						Use of additional resources to apportion accountability for delay in issuing of IFC	On Programme	On Programme	31-Dec-10	D Sharp
105	Encountering archaeological finds/burials/munitions during construction	Exhumation of archaeological finds/burials	Delay in construction programme	C Neil	High - 10/00	Additional funding for Archaeological works	N/A	On Programme	31-Oct-10	C Neil
						Agree protocol	Complete	Complete	20-Apr-07	T Condie
						AMIS to re-programme works accounting for hot-spots	Complete	Complete	30-Apr-07	S Clark
						Assess Infraco programme to determine if float contained within the high risk areas	Complete	Complete	28-Aug-07	T Hickman
						Carry out advanced archaeological works in advance of Infraco	Complete	Complete	31-Mar-08	P Douglas
						Check to ensure that AMIS programme has adequate float	Complete	Complete	14-May-07	J McAloon
						Headland working at Constitution Street	Complete	Complete	31-Dec-09	P Dobbin
						Identify hotspots	Complete	Complete	28-Feb-07	S Clark
Meet Archaeologist	Complete	Complete	28-Feb-07	S Clark						
Review Infraco programme regarding archaeological hotspots and ensure adequate programme float	Complete	Complete	31-Jul-07	T Hickman						

1011 - Period 05 Primary Risk Reg

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
139	Utilities diversion outline specification only from plans	Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services within LoD	Increase in costs or delays as a result of carrying out more diversions than estimated	F McFadden	High - 10.00	Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
						Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	F McFadden
						Solution to be developed to manage the issue of the underground structures at the cellar in York Place, design received 10.08.09.	Complete	Complete	30-Aug-09	F McFadden
						Trial excavations to confirm locations of Utilities and inform designer. Picardy Place and particularly Broughton St Junction IFC design incompatible with congested utilities.	Complete	Complete	30-May-10	M Blake
271	Inadequate quality of submission of approval. Partial submission of package. Programme compression. Lack of CEC resources. CEC does not follow agreed procedures.	Failure to process prior approvals applications within 8 weeks	Delay and disruption to Infracore programme	R Bell	High - 10.00	Agree approvals submission arrangements with CEC to align with SDS design programme and procurement programme.	Complete	Complete	31-Mar-08	T Glazebrook
						Assure the quality and timing of submissions	On Programme	On Programme	31-Jul-10	D Sharp
						Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie	Complete	Complete	28-Feb-07	T Craggs
						Fortnightly meetings of Approvals Task Force	On Programme	On Programme	31-Jul-10	D Sharp
						Where appropriate increase case officer resource to cope with programme compression	Complete	Complete	31-Oct-08	D Fraser
911	Scottish Power own and maintain a cable tunnel in the vicinity of Leith Walk that may or may not interfere with Tram construction and operation; exact location and depth of tunnel is unknown; condition of tunnel is unknown.	Presence of Scottish Power tunnel in Leith Walk requires approved construction methodology from Scottish power - works scheduled for August 08.	Tunnel may have to be decommissioned and re-laid in a more suitable location; tram alignment may require to be adjusted; special foundation solution e.g. cantilever may be required; increased capex; potential for tunnel collapse during operation and consequent disruption for tram.	C Neil	High - 10.00	Liase with Scottish Power to agree and approve method of crossing tunnel - SDS doing this	On Programme	On Programme	30-Jul-10	W Biggins
						Scottish Power to establish exact location of tunnel	Complete	Complete	2-Apr-07	M Blake
						SDS to try and ensure tram alignment footprint is outwith Scottish Power alignment - confirmation via thumbnails due 16th November	Complete	Complete	28-Dec-07	T Glazebrook
						tie to undertake engineering feasibility study	Complete	Complete	2-Apr-07	J Casserly

1011 - Period 05 Primary Risk Reg

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
990	SDS are behind programme with design review certificates and tie have decided not to extend programme period to account for this.	Financial impact of uncertified designs provided to Infraco	Modifications required to the designs post-contract award resulting in additional costs.	R Bell	High - £1.00					
1076	Utilities do not finish diversion works prior to Tramworks commencing work	Tramworks are unable to commence work or work is delayed/disrupted	Delay and disruption claims from BSC.	F McFadden	High - £1.00	Tramworks PMs attendance at Traffic Management meetings. Weekly meetings between tie Tramworks and Utilities PMs. 4-weekly tie Tramworks/Utilities management meetings. Identification of programme clashes between Tramworks and Utilities works tracked	Complete	Complete	31-Mar-10	C Neil
1078	Lack of effective engagement from BSC leaders towards tie.	Failure of partnership approach between tie and BSC.		S Bell	High - £1.00	Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements.	Complete	Complete	31-Dec-09	C Neil
1079	Failure of BSC to effectively resource up for project	Lack of competent resources within BSC to safely and effectively deliver Tram project.	Delay to programme and additional cost	F McFadden	High - £1.00	Apply contract re personnel	On Programme	On Programme	1-Jan-11	F McFadden
						List of staff and competencies to be provided	On Programme	On Programme	1-Jan-11	F McFadden
						Ongoing review of BSC resources and formal review at 4-weekly meeting. Objectives to be set for BSC at monthly meetings in order to monitor progress.	Complete	Complete	31-May-09	C Neil
						Resource led programmes	On Programme	On Programme	1-Jan-11	F McFadden
						Sub contractor approved process	On Programme	On Programme	1-Jan-11	F Dunn
						Where appropriate tie can request removal of resources.	On Programme	On Programme	1-Jan-11	F McFadden
173	Uncertainty over extent of contaminated land on route	Tramway runs through area of previously unidentified contamination/unforeseen ground conditions.	Increase in costs to remove material to special and other tip.	C Neil	High - £1.00	Issue containment and gl report to Infraco bidders	Complete	Complete	2-Mar-07	B Dawson
						tie to obtain ground investigation and contamination reports from SDS	Complete	Complete	29-Mar-07	R Bell
865	Buildings contain asbestos that was not uncovered during surveys	Asbestos found during demolition works and excavations for construction	Cost and delay during investigation and removal	C Neil	High - £1.00					
914	Required approval/acceptance turnaround time does not reflect SUC standard practice; SUCs do not have enough resource or process capability to achieve 20 day turnaround	Statutory Utility Companies unable to meet design approval/acceptance turnaround time to meet programme	Additional period required for design approval/acceptance turnaround	F McFadden	High - £1.00	SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with the exception of plate 15 and the redesign of the affected utilities at Palmerston Place	Complete	Complete	30-Nov-09	F McFadden
						SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with the exception of plates the redesign of the affected utilities at Baltic Street - IFC drawings then reduce	On Programme	On Programme	31-Dec-10	F McFadden
1084	Coonstraints applied to work areas post-contract to satisfy stakeholders	Additional Traffic Management and enabling works are required to meet stakeholder constraints applied post-contract	Additional cost and potential delay to programme	F McFadden	High - £1.00	Assess TM implications to minimise enabling works and additional cost. Areas concerned are Baltic Street Junction.	Complete	On Programme	31-May-11	F McFadden
1102	Design changes following utility diversions.	Known non-compliant utility diversions in relation to proximity to the DKE and/or other utilities.	Re-diverting of utilities with increased cost and programme impact	F McFadden	High - £1.00	Obtain reduction from SUCs	On Programme	On Programme	31-Oct-10	M Blake
						Where relaxation cannot be obtained replace plastic with steel	On Programme	On Programme	30-Oct-10	M Blake

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Period 05 Transport Scotland report Sections 2-7

On following pages are Sections 2-7 of the Transport Scotland report (Section 1 is the Project Directors report).

2 Progress

Overall

The cost, programme and risk information in this Period 05 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once agreement is reached with BSC on a new revised programme.

In this period BSC have reverted to reporting progress against the agreed Rev.1 contractual programme. This shows an OFRS date of 14 July 2013 against the contractual Rev.1 programme date of 06 Sep 11 and reports a 47 day slippage in the 53 day period since the Rev.1 programme was last reported against.

tie continue to monitor progress against the "live" programme which is based on the contractual Rev.1 Programme logic. This indicates a Sectional D completion in February-13, which is a 23 calendar day slippage from Period 4.

The critical path through this programme remains with the road and track works at the top of Leith Walk between Balfour Street and McDonald Road.

tie are in receipt of two independent experts' views and reports on an attainable Rev3 programme proposals both of which indicate that a Revenue Service date was achievable by late 2012, based on a July 2010 commencement and if a pro-active approach is taken by the Contractor. It should be noted however that the longer the current impasse remains the more unlikely a late 2012 completion becomes.

Overall the relationship with BSC is suffering in the following key areas:

- The refusal of BSC to progress works whilst Clause 80 Changes are being agreed;
- Work unable to start on-street where sites are available and accessible as BSC contractual obligations are not satisfied;
- Resolution of the contractual interpretation on BDDI-IFC (pricing assumption 1, development and completion of design), and
- Refusal by BSC to progress works under **tie** instruction in relation to Clauses 80/34/22/65

Linked to all of the above is the provision of a programme to completion capable of acceptance.

Progress remains behind the master programme, primarily due to:

- Finalisation of the agreement of change delaying the commencement of work even though instructed to progress by **tie**;
- Remaining pockets of incomplete utility diversions in the On-Street sections;
- Contractual obligations not met to allow works to commence on street;
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Failure of INFRACO to submit preparatory paperwork in a timely manner and of a suitable content i.e. Work Package Plans, Method Statements etc;
- Requirement for re-design of temporary works;
- Design slippage since novation of design to INFRACO (now recorded in v60 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme, assured and validation.

There has been no new Infraco works on-street other than those already progressed with works continuing at both Lindsay Road RW's and at Tower Place bridge, due to a lack of agreement on programme going forward, suitable sub contractor arrangements and completion of final design assurance checks by BSC.

Section	Description	Contract Programme Rev.01	BSC Forecast (P02) Rev.01	BSC Forecast (P05) Rev.01	BSC Movement in Period Cal Days (c) – (b)	tie Live Forecast (P04) Rev.01**	tie Live Forecast (P05) Rev.01**	tie Movement in Period Cal Days (f) – (e)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Section A	Depot completion	01-Jun-10	17-Aug-11	20-Jul-11	28	02-Jun-11	01-Jul-11	-29
Section B*	Test Track Available	01-Jul-10	06-Apr-12	25-Jun-12	-80	24-Feb-12	18-Mar-12	-22
Section C	All Phase 1a Construction complete	10-Mar-11	29-Nov-12	15-Jan-13	-47	04-Aug-12	27-Aug-12	-23
Section D	Open for Revenue Service	06-Sep-11	28-May-13	14-Jul-13	-47	31-Jan-13	23-Feb-13	-23

*The interpretation is that Sectional Completion "B" means that Test Track is available for Tram movements.

Contractual Strategy & Dispute Resolution

Dispute Resolution (Infraco)

In total, 16 items have now been referred to the formal dispute resolution process – 11 by **tie** and 5 by Infraco. The latest was referred by BSC early in period 6 and relates to landfill tax exemptions. Three have been resolved through negotiation, three through external mediation and nine were referred to adjudication. It is important to note that overall, the application of DRP to disputed matters has reduced BSC's claims for additional payment from £18.2m to £7.6m in relation to those DRPs which have actually reached a financial settlement (9 of the 15).

In the period we received one adjudicator detailed reasoning behind a decision provided in period 4. This was in relation to the MUDFA Rev 8 dispute. A review of this will be held in period 6 to identify any further actions required. Meantime, BSC has submitted their Estimate for the EOT awarded for Sectional completion a which is under review by **tie**.

The decision on the Murrayfield (Clause 80.13/34 instructions) DRP was also received. This gave some useful interpretation of these clauses in respect of known Notified Departures which **tie** has reviewed and is issuing further instructions to BSC in respect of this interpretation. The Depot Access Bridge dispute is in the adjudication process with hearings completing during week commencing 16th August.

DRP No	Subject	Nature of Dispute	Launched or planned	PD Mtg	Position Papers	CEO Meeting	Referral	Decision
A	MUDFA Rev 8	Programme	√	√	√	√	√	Decision awarded substantially in favour of tie .
5o	Depot Access Bridge	BDDI to IFC	√	√	√	√	√	Referred to financial panel by BSC. Decision due by 31/08
C	Murrayfield Underpass	Clause	√	√	√	√	√	Decision provided

Launched by tie
Launched by BSC

A strategic review of commercial and contractual options is underway and is reported to the Tram Project Board and Transport Scotland each period.

As part of the negotiations, **tie** has continued with the contractually assertive approach to management of the contract. In Period 5 this has included the issue of several contract notices. We await the response from BSC within the timescales set out in the Infraco contract

and CEC have been briefed on this process. Further information on this can be obtained from tie's Project Director.

Commercial Update (MUDFA)

In the period Carillion have initiated the Contract DRP process in respect of the value certified by tie in Certificate No 43. Under the internal resolution process Representatives Meetings have taken place and Position Papers exchanged.

Changes and tie deductions – tie has appointed Ian Allan associates to review and supplement tie's position. This will be developed to ensure that, if necessary, a robust and substantiated position can be presented to a third party.

Re-measurement of Works – As stated previously the measurement and valuation of remeasured works is concluded and agreed with Carillion. However Carillion have been unable to provide all back-up documentation in the form of testing sign off certificates and other Deliverables required under the Contract. tie has made a deduction from the agreed value of works until all required information has been received. Carillion have agreed to provide this outstanding information or confirm they are unable to do so. The production of the Deliverables (or the confirmation that they are unable to do so) should ensure that the difference under this heading identified within the Referral is removed from the dispute.

Enabling Works – in excess of 30% of the revised submission received in the last period has been reviewed. This review has found that the information provided by Carillion does not in the main support their Application in the Sum of 7,504K. Further review is ongoing and it is currently anticipated that this will be completed within the next period.

Disruption Claim – further information and data has been received by tie in the period. However tie remains of the opinion that the claim submitted by Carillion does not substantiate Carillion's position. Acutus have been asked to prepare an expert's report on Carillion's claim. This report will be used to refute Carillion's method of calculation and entitlement in a submission to a third party.

Design

IFC Design

v60 was submitted to tie on 23 July10 with a progress date of 05 July10. There has been an improvement of 46 calendar days to the Canopy & Boundary Treatment at Airport Kiosk. However, there are 25 IFCs with a slippage of more than 20 calendar days in the period, with the previously improved Murrayfield Stadium RW (v58 –v59 improvement of 40 days) slipping 32 calendar days between v59 & v60. The biggest slippage of which was the Re-Issue of Construction Drawings - Roads, Street Lighting, Landscaping, Drainage - Section 1D, with a slippage of 108 calendar days from v59. Concern remains regarding BSC's management of SDS.

v60 data has been used to inform the programme updates. tie have included these into the live programme.

- IFCs – Phase 1a: 178 issued out of 227 (79%)
- 56 Prior Approvals are included in v60 – 52 of which have been granted – those remaining include the RBS Gogarburn Tramstop, Edinburgh Gateway, Canopy & Boundary Treatment at Airport Kiosk and OLE pole locations (93%)
- 83 Technical Approvals out of 92 have been granted in v60 (88%)
- Roads approvals - One area remains outstanding for Technical Approval in Phase 1a (1C2- Picardy Place to St Andrew Square);
- Scottish Water has sent formal acceptances to BSC for all sections with the exception of 1C2 (Picardy Place to St Andrew Square) & 1C1 (McDonald Rd to Picardy Place).
- Sections 1A1, 1A2, 1A4, 1B, 1D, 1C3, 5B, 5C & 6 close reports have been signed off by CEC, subject to BSC concluding any concessions included in the reports during construction. CEC are reviewing all other sections based on the prioritisation list provided by BSC.

Design approvals status in Period 05 is summarised below:

Phase only	Number Required							Number
	V26	v31	V55	V56	V58	V59	V60	Granted
Prior Approvals	44	49	56	56	56	56	56	52
Technical Approvals	53	71	91	92	92	92	92	86
IFC	71	81	231	233	231	230*	227*	178

*reduction in number of IFCs from v59-v60 is due to reduction in no of designs being classified as IFC

Reasons for design slippage are being reviewed and recorded twice monthly at the design taskforce meeting, which is focused on resolving the outstanding design issues. **tie** is identifying and implementing opportunities to mitigate the impacts of this slippage. It should be noted that this is a consortium issue to manage, and **tie** will provide support in this respect. However, **tie** is testing, through audit, the management of SDS by BSC.

tie has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with an integrated design assured construction.

tie has been undertaking an audit on management of design by BSC/SDS. This has been ongoing for a number of weeks now with resistance encountered and contractual correspondence is in place in respect of this matter to try and re-start the audit process.

Utility & Cabling Works

All remaining on-street Utility, remedial & snagging works are on hold until after the Summer Embargo, whilst the tender process for Utility work at Baltic street is on hold until **tie** receive the required IFC drawings from SDS - which remain outstanding.

BT continue to progress their telecom re-cabling activities on-street, with cabling works in St Andrews Square & Torphichen St ongoing and cabling work at York Place due to commence in early Period 6.

BT Cabling on the northbound carriageway of Leith Walk (between Jane St – Foot of the Walk) was completed early in Period 5, whilst the cabling works between MacDonald Rd – Jane St has a forecast completion in September 2010. The required remedial and snagging works in Leith Walk are compounding the delay caused to Infraco on the Northbound carriageway, however the Southbound carriageway is available to BSC.

The delay of telecoms cabling work in parts of St Andrew Square would impact upon the commencement of Tram works which were programmed to start in June 2010 if Infraco and **tie** resolved other disputed matters.

Tramworks (INFRACO)

The progress achieved in the Period for INFRACO works was 1.8% against a plan of 2.3% this rate of progress is similar to that achieved in recent periods, and reflects the level of activity underway, primarily in the off-street sections. BSC are undertaking very limited on-street works in the Leith Docks area at present. The total cumulative completion is 22.2% at end of Period 5.

Progress continues to be monitored against the Revision 1 programme. The summary milestones against the agreed INFRACO contract and the short term Rev 1 programme milestones are shown in the table below.

Milestone	Period 05 (T0 17/7/2011)		Cumulative (Achieved to date)	Contract
	Planned	Actual	Actual	Planned to P05
Prelims	0	0	69	75
Construction	12	6	149	1086

Period 05 2010-11	Period		Delta	Cumulative		Delta	Project
INFRACO PERIOD 05 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	5.3%	2.8%	-2.5%	88.4%	4.0%	-84.3%	16.2%
Section 1b Foot of the Walk to McDonald Road	9.0%	0.0%	-9.0%	97.7%	1.3%	-96.4%	7.4%
Section 1c McDonald Road to Princes Street West	4.5%	0.0%	-4.5%	80.4%	0.0%	-80.4%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	4.8%	1.1%	-3.7%	90.1%	9.5%	-80.6%	42.0%
Section 2 Haymarket to Roseburn Junction	0.0%	2.5%	2.5%	100.0%	32.0%	-68.0%	4.2%
Section 5a Roseburn Junction to Balgreen Road	2.5%	0.9%	-1.6%	91.9%	6.9%	-85.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.2%	0.2%	100.0%	42.3%	-57.7%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	4.7%	4.7%	100.0%	14.4%	-85.6%	7.2%
Section 6 Gogar Depot	0.0%	5.6%	5.6%	100.0%	55.0%	-45.0%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.9%	0.9%	100.0%	36.5%	-63.5%	7.6%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.6%	2.3%	1.7%	98.0%	31.4%	-66.6%	58.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	2.3%	1.8%	-0.6%	94.7%	22.2%	-72.5%	100.0%

ON-STREET

Item	Period 03 % Comp	Period 04 % Comp	Period 05 % Comp
Section 1 Newhaven Road to Haymarket			
Lindsay Rd RW's	3.0%	5.7%	28.6%
S17 Tower Place bridge	5.0%	10.7%	32.2%
1B Leith Walk (Foot of the Walk – McDonald Rd)	1.3%	1.3%	1.3%
1D Princes Street to Haymarket	42.1%	42.1%	42.1%

OFF-STREET

Progress Off-street has continued or commenced at the following locations: Note that the (%) completion estimates relate to the full structure.

Item	Period 03 % Comp	Period04 % Comp	Period05 % Comp
Section 02 Haymarket to Roseburn Junction			
Caley Alehouse Demolition	100.00%	100.00%	100.00%
S19 Haymarket viaduct	60.8%	68.2%	73.4%
Trackwork Haymarket to Roseburn junction	1.2%	1.7%	2.4%
Haymarket Station TS	0.0%	0.0%	1.8%
Section 05A Roseburn Junction to Balgreen Road			
Russell Road Retaining Walls	19.7%	19.7%	22.4%
Murrayfield Wanderers Clubhouse Demolition	90.0%	96.0%	100.0%
Murrayfield Wanderers Clubhouse Accomodation Mods	0.0%	10.0%	30.0%
Section 05B Balgreen Road to Edinburgh Park Central			
S23 Carricknowe bridge	69.1%	69.7%	72.7%
Trackwork Balgreen to Saughton	28.1%	28.1%	28.1%
Trackwork Saughton to Bankhead (includes Guided Busway)	75.0%	75.0%	75.0%
Trackwork Edinburgh Park Station to Edinburgh Park Central	9.5%	9.5%	9.5%
S27 Edinburgh Park viaduct	92.9%	93.2%	93.5%
Section 05C Edinburgh Park Central to Gogarburn			
Trackwork Edinburgh Park Central to Gyle Centre	10.2%	10.2%	10.2%
A8 underpass (Excluding utilities works)	13.9%	16.1%	31.0%
S32 Depot Access bridge	12.3%	25.2%	34.8%
Trackwork Gyle to Depot Stop	0.0%	0.9%	1.8%
Trackwork Depot Stop to Gogarburn	7.4%	8.1%	8.1%
Section 06 Gogar Depot			
Depot Earthworks & drainage	96.0%	97.1%	97.1%
Depot Trackworks Civils			65.0%
Depot Trackworks - Track Laying	4.3%	12.8%	5.0%
Depot building	44.5%	55.0%	57.3%
Depot Sub-station	15.0%	21.0%	32.9%
Depot Access Roads	40.2%	43.6%	46.3%
Depot in totality	44.2%	49.4%	55.0%
Section 07 Gogarburn to Edinburgh Airport			
Gogar Landfill	4.6%	10.0%	14.6%
Gogarburn Bridge	98.5%	98.5%	98.5%
S30 Gogar Culvert No.1	100.0%	100.0%	100.0%
Trackwork Gogarburn to Ingliston P&R	8.2%	21.0%	22.8%
Hilton Hotel Carpark Phase 1	100.0%	100.0%	100.0%
W14A&B / W15C&D Gogarburn R/W's	22.0%	22.0%	26.0%
S31 Gogar Culvert No.2	100.0%	100.0%	100.0%
S34 Gogar Culvert No.3 (Remedial works to be done)	100.0%	96.0%	97.2%
Trackwork Ingliston Park & Ride to Edinburgh Airport	14.0%	19.8%	22.3%

Section	Commentary
Section 1a Newhaven to Foot of the Walk	No agreed programme for recommencing main works in this section Works are progressing on the Lindsay Road RW (1A & 1C), with BSC taken possession of Old Port Road in the period, works continuing on Tower Bridge
Section 1b Foot of the Walk to McDonald Road	No agreed programme for recommencing in this section
Section 1c McDonald Road to Princes Street West	No agreed programme for recommencing in this section
Section 1d Princes Street West to Haymarket	No agreed programme for recommencing in this section
Section 2 Haymarket to Roseburn Junction	<p><u>Haymarket Viaduct</u></p> <p>Work on the east abutment and deck slab continued during the period. Tramstop drainage and backfill continued during the period. Installation of the OLE bases and service ductwork commenced during the period</p> <p><u>Haymarket Yards</u></p> <p>Track drainage works continued during the period. BSC Estimate for the soft ground Change awaited.</p>
Section 5a Roseburn Junction to Balgreen Road	<p>Temporary & permanent works re-design along with commercial resolution delaying various structures. All required consents in place for track installation.</p> <p><u>Russell Road Bridge</u></p> <p>BSC progressing agreement of the 24" gas main protection methodology with SGN. Actual works now likely to mid September 2010, subject to Temporary works approvals by NR and SGN approvals for protection to the gas main. Soil nail works are now planned to be completed in a full road closure rather than a lane closure.</p> <p><u>Russell Road Retaining Wall W4</u></p> <p>No piling work carried out during the period. BSC [Expanded] completed construction of retaining wall units 10 to 17 during the period. Diversion of the Scottish Power supply to the depot by BSC is now planned for late August 2010.</p> <p><u>Accommodation works for SRU:</u> Commenced in period 4 with Crummocks on site and progressing well on a 14week programme.</p>
Section 5b Balgreen Road to Edinburgh Park Central	<p>Temporary & permanent works re-design along with commercial resolution delaying various structures.</p> <p><u>Balgreen Road to Carrick Knowe Bridge</u> Track drainage commenced during the period. <u>Carrick Knowe Bridge</u></p> <p>Constructed of the maintenance galleries at the abutments continued during the period. Backfill to the abutments recommenced during the period to allow construction of the run-on slabs. <u>Guided Busway</u></p> <p>Earthworks to link the guided busway to Carrick Knowe Bridge continued during the period.</p> <p><u>Fastlink</u></p> <ul style="list-style-type: none"> ▪ The scope for the remedial work has been agreed with CEC and issued to the contractor. ▪ The traffic management proposal to carry out the works has been approved with the start date to be confirmed following co-ordination the various sub-contractors. <p><u>Bankhead Drive</u></p> <p>No works by BSC during the period.</p>

Section	Commentary
	<p><u>Edinburgh Park Bridge</u></p> <p>Construction of the south approach ramp continued during the period. Delivery of rails for the South Gyle Access Bridge to Edinburgh Park section commenced during the period.</p> <p><u>Busgate</u></p> <ul style="list-style-type: none"> ▪ The gas main diversion was completed on 2nd August 10. This was delayed by two days due to the trench having been excavated to the wrong level and required to be backfilled and re-excavated. ▪ Drainage work on the north side of the tram was abandoned at the crossing of the existing HV cables and recommenced on the west side of the cables. Approximately 30m of pipe has now been laid. A temporary works solution is still required for the crossing under the cables through the wet ground.
<p>Section 5c Edinburgh Park Central to Gogarburn</p>	<p><u>A8 Underpass</u></p> <p>Phase 1/2: Main deck pour completed by 13th August 2010. Phase 4: Piling works completed 23rd July 2010. Temporary kingposts installed by 13th August 2010.</p> <p><u>Depot Access Bridge</u></p> <p>North Abutment: Abutment walls completed by 13th August 2010. South Abutment: Temporary works completed to pile platform level. 50% piles installed by 13th August 2010.</p> <p><u>Edinburgh Park Central to Gyle Tram Stop</u></p> <ul style="list-style-type: none"> ▪ The revised Permit to Commence Work was authorised on 22nd July 10 for the formation of the site access, the earthworks and CBR testing in this section. ▪ The top soil strip has been completed between 530+440 to 530+610 and the excavation to formation commenced on 10th August 10.
<p>Section 6 Gogar Depot</p>	<p><u>Section 6</u></p> <p>Depot Building works: Accommodation area: Building fit out currently 65% completed. Building envelope completed awaiting delivery and installation of doors and louvers. Workshop area slab works completed with exception of tramwash which recommenced on 19th July 2010. External works: Drainage works 90% complete. Ductwork installation commenced and 35% complete by period end. Track Laying: Track from access road crossing towards Depot building for 4 roads and bypass track approximately 70% completed.</p>
<p>Section 7a Gogarburn to Edinburgh Airport</p>	<p><u>Section 7</u></p> <p>Gogarburn Bridge: Area available for Siemens track laying. No works in period. IPR to EAL: Drainage works 75% completed. OLE foundations 70% complete. Works commenced to BAA phase B north of Eastfield Avenue on 5th July 2010. Gogarburn to IPR: Drainage works 80% completed. OLE Foundations 80% completed.</p>

Other Progress Points to note in Period 5:

- On 1st July 2010, Network Rail's Infrastructure Safety Review Panel supported our safety argument for modifying their track circuits against the effects of our traction supply stray current.
- First signalling interlocking FAT successfully completed and witnessed in Braunschweig, Germany

- The interlocking FAT for Depot West has been successfully carried out from 15 to 17 June 2010 in Braunschweig (Germany). The further interlocking application engineering and hardware manufacturing for Depot East, Airport and Haymarket have been progressed.
- Depot S&C FAT successfully witnessed in Sofia, Bulgaria
- The first tram delivered (UT2) was unloaded on 25 April 10 at Princes. Presently unit 3, unit 4, unit 5, unit 6, unit 7, unit 8 unit 9 and unit 10 have their correspondent Factory Acceptance Routine Test Certificate delivered by the Tram Inspector.
- Invitations for Unit 11, unit 12, unit 12, unit 14 and unit 15 to the Tram Inspector have been issued in order to get the Factory Acceptance Routine Test Certificate.

Issues in the Period

- Progress to various areas not taking place due to lack of engagement of Contractor following Issue of Instruction – Clause 80/Clause 34.1;
- Contractor's failure to comply with contractual requirements surrounding Permit To Commence having effect on progress of the works in various locations. Information being reviewed weekly;
- Further design slippage;
- Outstanding Information from Network Rail continues to delay submission for Technical Approval for Gogar Intermodal Station.

Tram Construction (Tramco)

CAF is progressing well against its contractual programme for delivery of trams to Edinburgh, however whilst the depot continues to progress well it is not yet available to receive the trams. The first tram delivered (UT2) continues to attract attention on Princes Street with over 74,000 visitors to date providing positive feedback.

14 trams in total have completed factory based testing and are delivered or stored ready for delivery. The remaining 13 are at varying stages of assembly along the production line from painting to final assembly and testing.

The full Operational Readiness detailed programme information is now included in the Master Tram Project Programme.

A number of meetings have been held and indicative dates used to allow a review of the programme and the potential impact to driver recruitment and training programme based on the current **tie** live programme. A full update will be put in place at the conclusion of the Rev 3 Recovery Programme exercise.

The Operational Readiness team are working towards taking delivery of the 1st & 2nd Trams at the Depot by October, slipped due to minor design and construction issues. We are working closely with the BSC planners and team to monitor progress at the Depot and a number of further meetings have been arranged for period 6.

Preparing for Operations

We have been planning in detail the first three stages of preparation for the Testing & Commissioning phases as well as the operational introduction of trams. The Benefits Realisation & Operational Readiness Committee was formed and is reporting to the TPB, and an integrated programme has been developed.

Planning for commissioning of the Depot plant and equipment and the trams is being discussed and programmed. This is leading to the prioritisation of elements of the delivery works in order to optimise the testing and commissioning period.

The procurement of the ticketing equipment for the tram system, to integrate with the existing Lothian Buses ticketing system has progressed to the stage where we have shortlisted and received and evaluated tender submissions. We expect to select a preferred bidder by November.



FOISA exempt

Yes
 No

Significant effort is being made on programming and planning the preparing for operations activities, including recruitment and training of both operations and maintenance staff. The maintenance of completed infrastructure assets is being worked on with BSC maintenance representatives.

Interface with other projects

The projects identified in the matrix below have the potential to impact or conflict with some or all of the following aspects of the Edinburgh Tram Construction programme.

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
				Start	Finish	Start	Finish	
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.								
New Hotel adjacent Ocean Terminal	Ocean Points Development Limited	New build hotel	Potential conflict with Infraco dependent on timescales. To be monitored.	Sep-09	Apr-12	TBA	TBA	To be monitored.
St.James Centre Re-development	CEC / Henderson Global	Redevelopment of existing shopping centre.	Interface with Picardy Place junction re-construction and Cathedral Lane sub-station	Nov-10	Jun-12	2011	2016	Downgraded from red to amber as commencement of this project is now indicated towards the completion of Tramworks and therefore interfaces should diminish.
National Portrait Gallery		Major building construction and re-furbishment. The renovation of the external facades, the overhauling of the existing windows, the renewal of the existing rooflights and roof covering. Additionally, it is proposed that an external ramp is formed to the front main entrance to allow disabled access.	Interface with Infraco works on St Andrew Street / York Place	Nov-10	Jun-11	Oct-09	Nov-11	Decant complete June 09 Lane closures (west bound) on Queen street, to allow space for a large hiab to be positioned full time outside the premises (October 2009 onwards). Also two, three week periods in January & February 2010, when further closures were required to allow a large crane in to remove/reinstate the roof. Conflict with the Tram traffic management team looking at making the section of Queen Street, between North St David Street and Broughton Street one-way (part of the Leith Street, Princes Street, South St David Street, North St David Street gyratory).
St Andrew Square Public Realm Works	CEC	Bespoke pedestrian walkways and Traffic Management/calming	Tram works on east side of the square	TBA	TBA	TBA	TBA	tie working closely with CEC to determine a solution.
St.Andrew Square	CEC	Demolition of existing buildings bordering	Infraco Programme	TBA	TBA	TBA	TBA	Infraco activities commencement TBA



FOISA exempt

Yes
 No

Development		South Side St.Andrew Square, South St David Street and Meuse Lane						
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elavators	ST.ANDREW STREET Traffic management issues when Infracore in Princes Street should this project require deliveries, craneage or Traffic management in same time period	TBA	TBA	Feb-11	Jul-12	Reclassified as amber due to delay in progressing On-street workscope
Edinburgh Gateway	Transport Scotland	New station to east of Gogar Depot	Approvals and Consents	Dec-09	Oct-11	Oct-10	Mar-12	Edinburgh Gateway Programme under review and being developed in conjunction with NR and TS. Inextricably linked to the wider Edinburgh Tram Network programme ¹⁰

Colour code

Amber	Managing any conflict
Red	Conflict which causes programme concern / unknown effect on tram programme

This matrix continues to be reviewed by **tie** to identify any potential impacts on the Tram programme as early as possible in order to manage them.

Other Reporting Streams Progress

The following sections describe progress on other areas of the project during Period 5.

Temporary Traffic Regulation Orders (TTROs)

Majority of the TM rationalisation in the City Centre was completed pre-embargo. These aim of these measures is to return the City Centre (as much as is feasible) to the pre-tramworks arrangements by using temporary kerbing.

Traffic Regulation Orders (TROs)

A Report is being prepared for submission to Council (Transport Infrastructure & Environment Committee) on 21 September regarding the recommendation to make TRO1 as submitted. Should any modifications be required, these to be picked up in a future TRO.

Network Rail:

Development	Planned	Expected	Comment
BSC immunisation strategy (NR Interface)	Complete		
HAZID	Complete		
NR Hazard Log	08/12/2009	P10 2011	Not received yet. This will be submitted as part of the Final Case for Safety which will follow tram running tests in section 5
Technical Studies			
Manual Modelling Report	Complete		
Manual Modelling Status Report	Complete		
Manual Modelling Impact Study	Complete		
Whole Life Cost Analysis	Complete		
Manual Modelling Metallic Bridges Report	Complete		
Psophometric Study	Complete		
Immunisation Calculations Study	Complete		NWR I-SRP 'Noted & Supported' the immunisation study on 01/07/2010
Testing			
Nottingham Trial	Complete		
Soil Resistivity Testing	Complete		
NR Signalling Immunisation (EMC) Test Plan	06/01/2010	P8 2010	BSC are currently advising period 8 2010 for formal issue. However tie has reviewed a draft proposal informally.
NR Signalling Immunisation (EMC) Test Report	31/03/2010	Early 2011	This will follow FETR installation and powered movement of trams currently expected in early 2011.
Implementation			
FETR Solution			
Procure Services	Complete		
Preliminary Design - AiP	Complete		
Detailed Design & Build	Complete		
Hand Back NR Infrastructure	05/11/2010	22/08/2010	This date is under threat due to disturbed asbestos in location cabinets on NR infrastructure. The asbestos must be removed prior to test & commissioning works.
Case for Safety - Signalling			
Produce Hazard Log Analysis Report	01/03/2010	Complete	ISRP submission was 'noted & supported' on July 1 st 2010
Safety Compliance Report	01/03/2010	Complete	ISRP submission was 'noted & supported' on July 1 st 2010
Issue - CFS - Signalling	12/04/2010	Complete	ISRP submission was 'noted & supported' on July 1 st 2010
Immunisation Final Case for Safety			
Produce Hazard Log Analysis Report	P10 2011		

Network Rail – Waverley Steps

We have now received an indication of the likely construction timescales for the NR Waverley Steps project. We now await Network Rail's discussion with CEC in respect of the traffic management interface arrangements as agreed as part of the TAWS process for this project.

Murrayfield SRU Accommodation Works

Contractor: Crummock

Start Date: 28th June 2010

Anticipated Completion Date: 1st October 2010

Site clearance for new car park area, south car park extension, Gatehouse steelwork erection, floor construction and Turnstile block floor construction works have been completed in the period. Formation of new entrance to Murrayfield Stadium and Manufacture of retractable bollards and mechanical gate works were commenced and ongoing in the period.

South Gyle Access Sewer Diversion

Contractor: Barhale

Anticipated Construction Start Date: 26th July 2010

Anticipated Completion Date: 05th November 2010

- Work commenced on site on 26th July 10.
- The diversion of the existing sewer at the drive shaft (MH 2) has commenced and the excavation of the shaft will commence on completion of the temporary diversion.
- Excavation has commenced at MH 1.

Edinburgh Park Private Utilities – Clancy Docwra

The Completion Certificate has been issued to Clancy Docwra dated 2nd July 10.

MUD Works at Edinburgh Airport

The latest documentation submission was reviewed by BAA and a final update meeting is expected by w/c 16th August 10.

Burnside Road Realignment

Newgate and RCL continued to monitor the barrier system software. **tie** Ltd has proposed to BAA that by w/c 16th August there will have been 4 weeks of uninterrupted operation and that the installation should be accepted by BAA.

Edinburgh Gateway

Progress on the Edinburgh Gateway Project in Period 5 2010/11 is summarised as follows:

- Transport Scotland has confirmed that “Scottish Ministers have re-affirmed their requirement that Gogar Interchange (sic) is delivered to coincide with completion of the tram project”. **tie** will use their best endeavours to achieve this, however as there is no formal agreement between Transport Scotland and CEC in this respect, further discussions will be required. **tie** will continue to seek agreement on Edinburgh Gateway project and consult with Transport Scotland at the appropriate times.
- Prior Approval was granted on 28th July 2010. Efforts will continue to recover the delay incurred in achieving this by seeking to accelerate production of IFC. This will depend on availability of the SDS design team, which is a separate team from the core ETN team.
- **tie** have requested an Estimate from BSC for Edinburgh Gateway construction works as a Change under the Infraco Contract. The request for the Estimate contains a number of programme matters that **tie** have indicated that Infraco should assume when completing their Estimate. These programme points are in line with key milestone dates currently under discussion between **tie** and Transport Scotland.
- Following an initial discussion with Transport Scotland, **tie** held a Construction Staging meeting with TS, Network Rail and BSC. The primary aim of the Construction Staging meeting was to identify the actions required by all parties to allow BSC to meet high level milestones. The meeting focussed particularly on BSC scope. Within these meetings, **tie** put forward a proposal which will offer Network Rail an opportunity to significantly reduce their programme. This will involve additional cost to the tram scope, however the overall benefit to Transport Scotland should be significant. **tie** attended a Construction Staging meeting with Transport Scotland and Network Rail on 13th August 2010 to support the development of a **tie** proposal which will minimise NWR's programme. The indications are that **tie**'s proposal will be taken up by Transport Scotland and Network Rail.
- **tie** have agreed to take responsibility for a revised road drainage design at the A8 which has arisen from Network Rail's sewer design. This is due to the optimum solution being likely to overlap with BSC construction activity. The initial Estimate received from BSC was based on the Network Rail preliminary design proposal, however **tie** have identified a potential solution which would be more cost and programme effective and have asked BSC to amend their Estimate for A8 road drainage accordingly. To assist in maintaining the design programme, **tie** has instructed BSC to progress this design.
- **tie** supported CEC with respect to the legal agreements at the meeting on 5th August 2010. Although constructive, the meeting highlighted that Network Rail's requirements for agreement are unlikely to be met by the other parties. **tie** remain concerned that the target completion of October 2010 for completion of legal agreements will not be achieved. **tie** will not accept responsibility for any delay associated with legal agreements not being reached in line with the needs of the construction programme. The land transfer from CEC to Network Rail cannot proceed ahead of other agreements being substantially complete because the land transfer needs to include servitudes in favour of **tie**/TEL to allow access to and through this land for the operation and maintenance of the ETN.
- CEC/**tie** has a confirmed grant totalling £1,167k. Transport Scotland has provided a grant offer for additional funding to this level, subject to provision of supporting evidence.
- Costs associated with a redesign of the A8 road drainage are provisional within the **tie** forecast. This will be undertaken by **tie**, having arisen as a result of Network Rail having to divert the main 1500 sewer.
- **tie** invited Transport Scotland to a meeting on 13th August 2010 to review a revised **tie** Estimate for the Edinburgh Gateway project based on the approved Prior Approval drawings and

anticipated technical solutions. **tie** presented the revised Estimate. **tie** have offered a follow up meeting to allow other Transport Scotland staff the opportunity to review the Estimate. A risk register will be presented at this follow up meeting.

BSC now include a narrative on Gogar Interchange (Design and Construction staging activity) within their period report. The content and quality of reporting is improving, but still unsatisfactory.

Forecast Cost to Complete Design

Forecast outturn is now at £1,167k against an original £880k:

£880k Breakdown

SDS	£400k
JRC	£ 30k
tie	£100k
Siemens	£350k

£1,167k Breakdown

SDS	£540k
JRC	£ 45k
tie	£120k
Siemens	£327k
Const. Staging	£ 30k
ICP	£ 20k
Name Change	£ 15k
A8 Drainage	£ 20k
Legal Costs	£ 50k

Transport Scotland has agreed the required additional Grant funding subject to **tie** providing substantiation of these costs.

tie have discussed outstanding milestone applications with BSC in an effort to ensure cash flow is consistent with progress.

Period 5 Design progress

At the end of Period 5 **tie** assesses the design phase as 87% complete for the increased scope.

Cost of work done to date is £1,000k versus the £880k originally forecast and the £1167k revised AFC.

The Prior Approval application for Edinburgh Gateway was approved on 28th July 2010.

Design Management meetings have continued between **tie**, TS and NR and fortnightly conference calls have taken place between **tie**, NR and the respective designers.

Design co-ordination is now largely dealing with detailed engineering issues rather than issues of principle. **tie** continue to have concerns as to Network Rail accepting their responsibility for leading the design co-ordination between both designs. Responsibility in this respect was agreed between TS, NR and **tie** at the outset of the design.

Tram Design Issues

BSC previously identified a need to discuss the reduced headroom for the OLE through the tramstop with the Independent Competent Person. The **tie** engineering team have discussed this further with BSC and have received confirmation that this is no longer an issue. Final confirmation will be sought during the Design Review carried out in accordance with the Infraco Contract.

Tram Patronage Modelling & Business Case

Following a meeting with Transport Scotland during Period 4, all requested information to inform the transportation modelling process has been received from Transport Scotland's consultants. The tram related modelling assumptions (dwell time, interchange penalties and run time) as well as revised updated (post recession) planning inputs and new bus/heavy rail integration plans have been agreed with **tie** / TEL for the updated modelling. A full set of model scenarios are in the process of being run and support has been provided to **tie** / TEL with production and interpretation of standard outputs for each test for input into the TEL business case models to determine operational implications of operating the tramway through the Gogar Intermodal Station. Going forward, JRC focus will shift to specific reporting for the Edinburgh Gateway Station and WETA, and JRC will continue to provide the support required to inform the TEL revised business case as necessary.

An extract of the current programme and remaining activities is as follows:

1-2.8 Gogar Station Model Update	06-Jun-10 A	02-Sep-10	58.5d		
JRC-1800-100	14-Jun-10 A	18-Jun-10 A	5.0d	Inception Meeting and Project Startup	100%
JRC-1800-200	14-Jun-10 A	16-Jul-10 A	15.0d	Review of Patronage and Revenue Forecast process	100%
JRC-1800-300	21-Jun-10 A	16-Jul-10 A	10.0d	Review of existing JRC Do-minimum models	100%
JRC-1800-350	08-Jun-10 A	28-Jul-10 A	5.0d	Establish new planning scenario with WETA	100%
JRC-1800-400	26-Jun-10 A	29-Jul-10 A	10.0d	Update 'without Gogar' tram VISUM model	100%
JRC-1800-500	28-Jun-10 A	30-Jul-10 A	10.0d	Create 'with Gogar' tram VISUM model	100%
JRC-1800-550	09-Jul-10 A	23-Aug-10	15.0d	Model sensitivity tests to support WETA	30%
JRC-1800-600	27-Jul-10 A	20-Aug-10	20.0d	Revenue and risk including offline sensitivities	50%
JRC-1800-650	30-Jul-10 A	31-Aug-10	10.0d	Revenue and risk including offline sensitivities for WETA	30%
JRC-1800-700	06-Aug-10 A	02-Sep-10	15.0d	Reporting, review and presentation	10%
JRC-1800-750	06-Aug-10 A	02-Sep-10	10.0d	Tram revenue updates 'Vision Note'	10%

Detailed design continued for the tram stop structure and the northern retaining wall. With respect to the Retaining Wall, outstanding information on loadings was received in Period from Network Rail. CEC has agreed to review the design as a priority but it is not realistic for that review to be complete within 3 weeks.

tie have proposed a meeting of the Tram Project and Network Rail ICP's to review the design assurance process for the project.

Programme Milestones

Discussions are continuing between **tie** and Transport Scotland to agree Key Milestones. The proposal below has been put to Transport Scotland by **tie** in line with recent discussions on the programme and completion for Edinburgh Gateway project. **tie** await Transport Scotland's response.

PERIOD Ending	
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ALL DATES ARE INDICATIVE ONLY UNTIL BASELINE PROGRAMMES ARE AGREED

Progress against milestones in programme				
		Baselined	Forecast	Status / Completion Date
Edinburgh Gateway - Tram Works				
Milestone G1	Completion of Detail Design	30-Aug-10		
Milestone G2	NR Approval (Form B)	30-Sep-10		
Milestone G3	Completion of Technical Approvals	30-Sep-10		
Milestone G4	Completion of Statutory Approval & Consents (Prior Approval)	28-Jul-10		
Milestone G5	Completion of Issue for Construction (IFC) Information	18-Oct-10		
Milestone G6	Completion of Stage 1 Tram/Business Case Modelling	22-Jun-10		
Milestone G7	Completion of Construction Staging and Programme	30-Sep-10		
Milestone G9	Provision of Proposal to TS (Price & Programme)	08-Oct-10		
Milestone G10	Provision of Grant Offer	15-Oct-10		
Milestone G11	Confirmation of Scope of Legal Agreements/Heads of Terms	05-Aug-10		
Milestone G12	Completion of Heads of Terms	19-Aug-10		
Milestone G13	Completion of Legal Agreements	01-Oct-10		
Milestone G14	Commencement of Tram Construction Phase 1	18-Oct-10		
Milestone G15	Completion of Tram Construction Phase 1	31-Mar-11		
Milestone G16	Access to Tram Area 1 for NR Works (Ref.252960/CIV/6001/001)	01-May-11		
Milestone G17	Access to Tram 2 for NR Works (Ref.252960/CIV/6001/002)	01-Jul-11		
Milestone G18	Commence Tram Construction Phase 2	01-Jul-11		
Milestone G19	Commence Network Rail Phase 2	01-Dec-11		
Milestone G20	Commence Commissioning	01-Jan-12		
Milestone G21	Completion of Commissioning	30-Jun-12		
Milestone G22	Entry into Service	01-Jul-12		
Milestone G23				

Item Complete	Strikethrough		
Item due for completion on time	Green	Green	

Legal Agreements

The scope of **tie** works now includes an allowance for external legal costs in relation to land or agreements. It is likely that **tie** will need legal advice in relation to agreements with Network Rail. **tie** expects that the extent of this will become clearer once Network Rail tables some draft agreements for review.

Long-lead Items / Abortive Works

tie has written to Transport Scotland confirming arrangements put in place with respect to avoiding abortive costs. Transport Scotland has confirmed that **tie** should take steps to minimise the abortive costs on the basis that the Edinburgh Gateway project will go ahead. CEC and Transport Scotland are discussing terms of a grant extension that will also cover abortive costs.

tie are now considering a requirement for a temporary radio mast which may be required to allow Tram project systems commissioning to progress prior to completion of the Edinburgh Gateway scope.

Drainage for the earthworks at the Depot is currently being installed to the west of the Depot Access Bridge. There is no option that does not involve some abortive cost if Edinburgh Gateway goes ahead as drainage must tie into the sewer that will be relocated by Network Rail. **tie** has identified ways of minimising the cost of those abortive works.

tie is continuing with the implementation of the existing ETN scheme unless otherwise instructed by Transport Scotland.

Construction Staging

tie have advised Transport Scotland of areas of work which would require to be implemented immediately to minimise/mitigate delay to the Gogar Interchange works and the impact on ETN. This is very minor work, however Transport Scotland have requested further detail on costs associated with this work. **tie** will provide this, however this will delay commencement of these works. **tie** would suggest contingency funding should be agreed between **tie** and Transport Scotland that will allow similar issues to be actioned immediately by **tie** in future. This matter was discussed further in a meeting between **tie** and Transport Scotland on 6th August 2010 at which Transport Scotland advised of their need to ensure that any commercial risk to TS is eliminated. **tie** advised that such risks must be to Transport Scotland's account. **tie** reminded TS that the nature of these works was extremely minor. Transport Scotland will now consider **tie**'s proposal for contingency funding.

tie's request for an Estimate from BSC includes all programme matters discussed at Construction Staging meeting held with TS, NWR & BSC.

Network Rail has advised of a delay of 2 – 3 months for their implementation of the Scottish Power 33Kv cable diversion. **tie** are considering the implications of this with respect to the Change process (the request for an Estimate) and the construction programme for both ETN and Edinburgh Gateway with a view to mitigating the effects of this delay where reasonable to do so.

Headline cost report

Current Financial Year

	FY 10/11			FY 10/11			FY 10/11			COWD To Date	Costs To Go	Total AFC
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	4.048	11.984	-7.937	27.896	46.606	-18.710	120.236	142.245	-22.009	375.738	169.262	545.000
Other Funding	0.334	0.990	-0.655	2.303	3.848	-1.545	9.928	11.745	-1.817	31.024	13.976	45.000
Demand on TS	3.714	10.995	-7.281	25.593	42.758	-17.165	110.308	130.500	-20.192	344.714	155.286	500.000

The 'AFC' figure of £545m (table above) does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project. Rather, the forecast presented reflects our best view of the spend profile of the funding currently available for the delivery of the entirety of phase 1a.

Given the continuing commercial uncertainties with the Infraco and continuing delays to the project it is considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. It is not however possible at the present time to accurately forecast a reliable outturn cost until the key commercial issues are resolved through the contractual and legal process

TIE Ltd presented an updated forecast for 2010/11 and 2011/12 project spend to TS and CEC on 8th July. The presentation was a follow-up action to The Funders Operators Group (Transport Scotland, Edinburgh Council and TIE Limited) action minuted on 17th June 2010.

The review of spend for 2010/11 has resulted in a tuning down of forecast from £142.3m (budget) and £143.0m (Q1) forecast to a Q2 forecast of £120.2m. Sensitivities to the £120.2m were flagged to CEC and TS, and tie committed to keeping TS and CEC updated as to the progress of project Carlisle and any material impacts on the Projects spend profile.

tie are now escalating all key issues to Dispute Resolution Procedure (DRP) and other contractual measures following the failure of mediation to provide an acceptable outcome. COWD to date is £375.7m, with funding to date split to TS (£344.7m) and CEC (£31.0m).

Actual YTD 5 & forecast P6-P13 FY10/11

£m	2010/11 to P5	Forecast P6-P13, 10/11	Forecast FY10/11
Infrastructure and vehicles	21.8	87.2	108.9
Utilities diversions	-0.3	-4.5	-4.8
Design	0.7	1.3	2.0
Land and compensation	0.3	0.0	0.3
Resources and insurance	5.4	8.4	13.8
Base costs	27.9	92.4	120.3
Risk allowance	0.0	0.0	0.0
Total Phase 1a	27.9	92.4	120.3

YTD 2010/11 COWD is £27.9m in period 5, -£1.6m behind the P4 forecast for P5.

The Full year forecast for 2010/11 is £120.3m (£143.0m Q1).

Key Risks and sensitivities to the £120.3m forecast for are:

- SUC betterment +£4.5m
- Infraco Main works progress up to -£25.3m (indicative view of last quarter Infraco spend). OR slippage sensitivity of £8.4m per period
- Project Carlisle – structure of outcome will influence spend profile

As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.4m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods

when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2010/11 and future years.

Current Financial Year Profile

Profile for FY10/11

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY10/11
Infrastructure and vehicles	16.7	9.8	46.8	35.6	108.9
Utilities diversions	-0.4	0.1	-2.8	-1.8	-4.9
Design	0.5	0.4	0.5	0.6	2.0
Land and compensation	0.2	0.2	0.0	0.0	0.3
Resources and insurance	3.2	3.4	4.0	3.2	13.8
Base costs	20.1	13.9	48.6	37.6	120.2
Risk allowance	0.0	0.0	0.0	0.0	0.0
Total Tram	20.1	13.9	48.6	37.6	120.2

- Costs for 2010/11 are forecast at £120.2m. *Note: This forecast is sensitive to the key risks as identified above.*
- The latest forecast is based upon **the** Project Managers view as at the end of period 4, updated and amended in-line with the assumptions presented to TS on 8th July.
- **The original TS share of the budget (£130.5m) has been reduced to a forecast of £110.3m.**

Project Cashflow Forecast

Re-baselined Phase 1a Cash Profiling

£m	Cum FY07/08	Actual 08/09	Actual 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.6	45.2	83.5	108.9	65.7	333.9
Utilities diversions	18.4	33.4	10.6	-4.9	0.0	57.6
Design	24.4	4.7	2.1	2.0	0.9	34.2
Land and compensation	16.8	1.7	1.6	0.3	0.0	20.5
Resources and insurance	42.9	16.0	15.9	13.8	10.3	98.9
Base costs (inc 1b)	133.1	101.0	113.8	120.2	76.9	545.0
Risk Allowance	0.0	0.0	0.0	0.0	0.0	0.0
Total	133.1	101.0	113.8	120.2	76.9	545.0

Note: Base costs include £6.2m for ph 1b.

Per the note in 3.1 the 'AFC' figures of £545m does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project, but point to 'our best view' of the spend profile of the funding currently made available for the delivery of the entirety of phase 1a.

The TEL board have approved a risk allowance within the current funding arrangements of up to £48.2m, which takes the current agreed budget up to £530.0m.

Time schedule report

Report against key milestones

The table below reflects the milestones set out against the Rev1 programme.

Milestones	Baseline programme date	Actual / current forecast date tie live prgm
Approval of DFBC by CEC	21 Dec 06A	21 Dec 06A
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A
TRO process commences	14Dec07A	10-Dec-07A
Approval of FBC by TS – approval and funding for INFRACO / Tramco	09 Jan 08	Dec 07A
Princes Street closed	03-Feb-09	22-Feb-09A
Tramco / INFRACO – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A
Construction commences	14-Apr-08	14-May-08A
First track installation commences – on street	03-Nov-08	Jun 2009A
Carrick Knowe Bridge commences	21-Aug-08	19-Aug-08A
A8 underpass commences	08-Aug-08	28-Aug-08A
Haymarket viaduct commences	08-May-08	01-Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	01-Sep-08A
Tram mock-up delivered	Oct 2008	Nov 2008A
Demolition of Wanderers clubhouse	25-Aug-08	05-Jan-10A
Edinburgh Park viaduct complete	24-May-09	Sep-10
Princes Street re-opened	01-Aug-09	29-Nov-09A
NR immunisation complete	Nov 2009	Dec-10
Utilities works complete (including telecoms)	Nov 2008	Mar-11
All demolition work complete (S21C)	22-Aug-08	Dec-10
All Issue for Construction (IFC) drawings delivered (inc Gogar interchange design)	21-Jan-09	Nov-10
Haymarket viaduct complete	08-Dec-08	Jan-11
All consents and approvals granted	18-May-09	Nov-10
Design assurance complete	20-Jan-09	Nov-10
1 st Tram delivered	09-Apr-10	25-Apr-10A
Carrick Knowe bridge complete	11-May-09	Jan-11
A8 underpass complete	14-Jul-09	May-11
Roseburn viaduct commences	20-Jan-09	Nov-10
TRO1 process complete	01-Dec-09	Sept-10
Recruitment commences for Operations	July 2010	Dec-10
1 st OHL installed (Section 6 Depot)	11-Dec-09	May-11
1 st section (other than depot) complete ready for energisation (2)	25-June-10	Jul-11
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	Dec11
Final tram delivered	17-Jan-11	Feb-11
Commission Section 6 (depot)	25-Mar-10	Oct-11
Roseburn viaduct complete	20-Apr-10	Oct-11
Test track complete (Ready for tram testing)	23-Apr-10	Feb-12
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	Oct-11 to Mar-12
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	Nov-11 to Aug-12
Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	Jun-11 to Aug-12
Driver training commences (excludes depot)	Nov 2010	May-12
System testing complete off street	09-Dec-10	Sep-12

Milestones	Baseline programme date	Actual / current forecast date tie live prgm
Construction Line 1a complete	17-Jan-11	Aug-12
System testing complete on street	16-Feb-11	Sep-12
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	Nov-12
Shadow running starts	18-Apr-11	Nov-12
Shadow running complete	July 2011	Feb-13
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Feb-13
Open for revenue service	July 2011	Feb-13

Guidance for Completion:
Legend for colouring of Actual / forecast date text

Green: Actual / forecast date is ahead or in line with baseline
Yellow: Slight slippage – readily recoverable with action.
Pink: Significant slippage but expect recovery can be achieved
Red: Notable / significant slippage – difficult to recover, even with action.

Key Issues Affecting Schedule

- Lack of agreement on the on-street construction programme preventing critical areas at Leith walk and Picardy Place commencing;
- Continued refusal of the consortium to act on instructions issued under Clause 80.13 and 34;
- Completion of redesign of the permanent works to allow commencement of the construction of structures from Baird Drive through to Balgreen Road.

12-Week Look-Ahead

Until the revised programme is in place the forecast for the next 12 weeks continues to be generated from the **tie** Live programme including latest updated information from both BSC and **tie** Project Managers.

Note that due to the uncertainty surrounding the On-street section of the Infraco works, that these works have been removed from the 12 week forecast other than for areas that are currently underway.

Milestones	Actual / current forecast date
5A - Murrayfield Stadium Accommodation Works (excludes clubhouse)	16-Aug-10C
1A4 - Lindsay Rd Retaining Wall A+C	16-Aug-10C
1A3 – S17 Construction Works Tower Place bridge	16-Aug-10C
1A1 - Continue S-E-Ms Bernard Street to Foot of the Walk	16-Aug-10C
1C2 - Telecoms Works Picardy Place to St Andrew Square	16-Aug-10C
2A –Trackworks Haymarket to Roseburn Junction -1135m	16-Aug-10C
2A – Haymarket viaduct	16-Aug-10C
5A - Construct New Scotrail Carpark	16-Aug-10C
5A - W4 Russell Road retaining wall	16-Aug-10C
5A – S21E Water of Leith Bridge	06-Sep-10S
5A – S22 Balgreen Road Bridge	30-Aug-10S
5A - S20 Russell Road bridge	01-Oct-10S
5B - Trackworks Balgreen Rd Saughton Road North	16-Aug-10C

Milestones	Actual / current forecast date
5B - S23 Carricknowe bridge	16-Aug-10C
5B – Trackworks Bankhead to Edinburgh Park Station	16-Aug-10C
5C - A8 Underpass	16-Aug-10C
5C - S32 Depot Access bridge	16-Aug-10C
5C – Trackworks Gyle to Depot	16-Aug-10C
5C - Trackworks Depot Stop to Gogarburn	16-Aug-10C
6 – Depot Sub-station	16-Aug-10C
6 - Depot Building	16-Aug-10C
6 – Depot Access Roads	16-Aug-10C
6 – Depot Track Works	16-Aug-10C
7 – Trackworks Gogarburn to Ingliston Park and Ride	16-Aug-10C
7 – Gogar Landfill (settlement period)	16-Aug-10C
7 - W14/W15 Gogarburn RW	16-Aug-10C
7 – Trackworks Ingliston Park and Ride to Edinburgh Airport	16-Aug-10C
5C – Trackworks Edinburgh Park to Gyle	16-Aug-10C
5B – S26 South Gyle Access bridge Sewer Diversion	16-Aug-10C
6 – Complete Depot Earthworks	08-Sep-10F
1C3 – Telecoms Works St Andrew Square to Princes Street West	13-Aug-10F
1D – Telecoms cabling Haymarket to Crescents	11-Oct-10F
5B - Trackworks Saughton Rd to Bankhead (incl Guided Busway)	16-Aug-10C
5B – Edinburgh Park Stn – Edinburgh Park Central Trackworks	16-Aug-10C
5A - W18 Murrayfield TS RW	30-Aug-10S
5A – S21B Murrayfield Stadium RW	11-Oct-10S
5C - Complete S27 Edinburgh Park Station bridge	29-Sep-10F
1B – Telecoms Works Jane Street to McDonald road	13-Sep-10F

Key: A=Actual; C=Continues in period;S=Start; F=Finish

Risk and opportunity

Review of Risk Register

Summary

There were six risk reviews held in the period. There were nine draw-downs on the risk allowance approved in the period totaling £2,747,583. These are detailed later in the report. Based upon the revised project risk allowance this leaves a risk balance of £800k.

Risk and Opportunity Reviews

The following reviews took place in the period:

Date	Format of review	Attendees	Comments
29/7/10	Project Risk Register Review	Infraco Director Infraco Construction Director Project Risk Manager	Risks and Treatment Plans Reviewed (update of register underway)
3/8/10	Section 1C and 1D	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
3/8/10	Depot and Section 7	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
3/8/10	Network Rail and Trackform	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
3/8/10	Section 2 and Section 5	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
4/8/10	Signalling and Communication; BT Cabling	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed

BSC Consortium Risk Management

A response to BSC's latest correspondence was sent in the period.

Risk Register

The Primary Risk Register is attached at Appendix D. The Primary Risk Register contains those high impact risks which are impacting (or have the potential to impact) the project at this moment in time. In addition, the potential risks identified in regard to programme slippage are being reviewed periodically and will form part of the updated QRA. There are 43 risks in the risk register. The top five project risks are listed on the following pages.

1011 - Period 06 Top 6 Risks

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
543	General delay to programme with various causes e.g. failure to obtain approvals on time, contractor issues, access after completion of utility diversions	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Clark	High (30/10)	Access maps showing areas available	On Programme	On Programme	30-Nov-10	F McFadden
						Clause 34/80 15	On Programme	On Programme	31-Aug-10	S Bell
						Contractually assertive workstreams to progress programme	On Programme	On Programme	29-May-10	S Bell
						DRP Mudra Rev 8 response	On Programme	On Programme	31-Aug-10	S Bell
						Weekly 6e/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
1077	Base Date Design Information to issued For Constructions (BDD-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High (30/10)	Continued DRP / Adjudication Process	On Programme	On Programme	31-Jul-10	S Bell
						Contract interpretation and technical expert witness work	On Programme	On Programme	31-Jul-10	S Clark
						Deploy alternative utilities contractors to progress utilities	On Programme	On Programme	30-Nov-10	F McFadden
						Enhanced management focus on various workstreams and options relating to progress of the project	Complete	Complete	31-May-10	Richard Jeffrey
						Establish a process which will act as a control mechanism for design changes. (if one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
						Intensive Mediation Marathon 29/6/09 to 9/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
						Mediation resulted in no overall agreement on BDD - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
						Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	Complete	Complete	31-Jan-10	S Bell
						PA1 challenge	On Programme	On Programme	31-Aug-10	S Bell
						Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell
						Siemens 33 initiative to achieve Airport to Bankhead Drive	On Programme	On Programme	31-Aug-10	S Bell



FOISA exempt

Yes
 No

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1011 - Period 05 Top 5 Risks

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost and programme delay	F McFadden	High (H, 50)	Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Nell
						Extent of soft ground being investigated. External specialist advice deployed.	On Programme	Complete	30-May-10	M Paterson
						Technical challenge against SDS designs	On Programme	On Programme	31-Oct-10	C Nell
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	Dennis Murray	High (H, 50)	Additional resource from T&T	Complete	Complete	29-Jul-09	M Paterson
						Agreed with BSC for independent evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
						All estimates to be scrutinised by the commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay and other commercial resources on these areas	On Programme	On Programme	30-Dec-10	M Paterson
						Clause 34/80 Issues using DRP for disputed values	On Programme	On Programme	31-Aug-10	S Bell
						Enhanced management focus on various workstreams and options relating to progress of the project	On Programme	On Programme	30-May-10	Richard Jeffrey
						Legal challenge to Clause 80 and BSCs interpretation thereof	On Programme	On Programme	31-Jul-10	S Bell



FOISA exempt

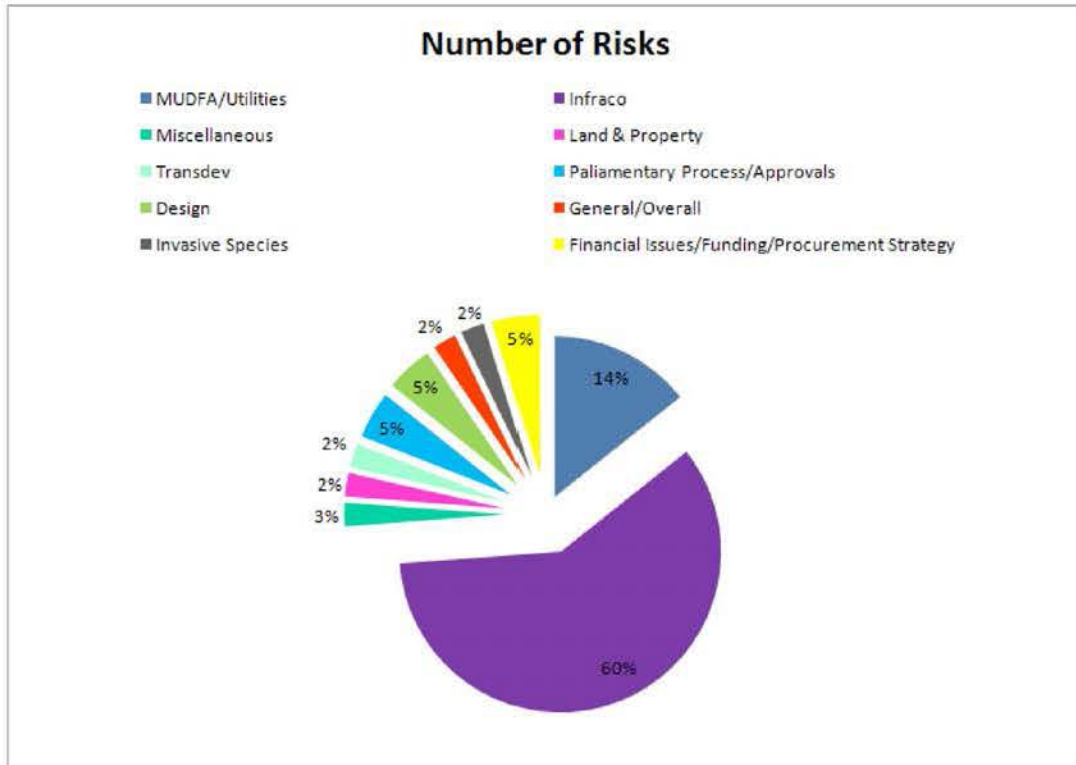
Yes
 No

Printed On: 06 Aug 2010

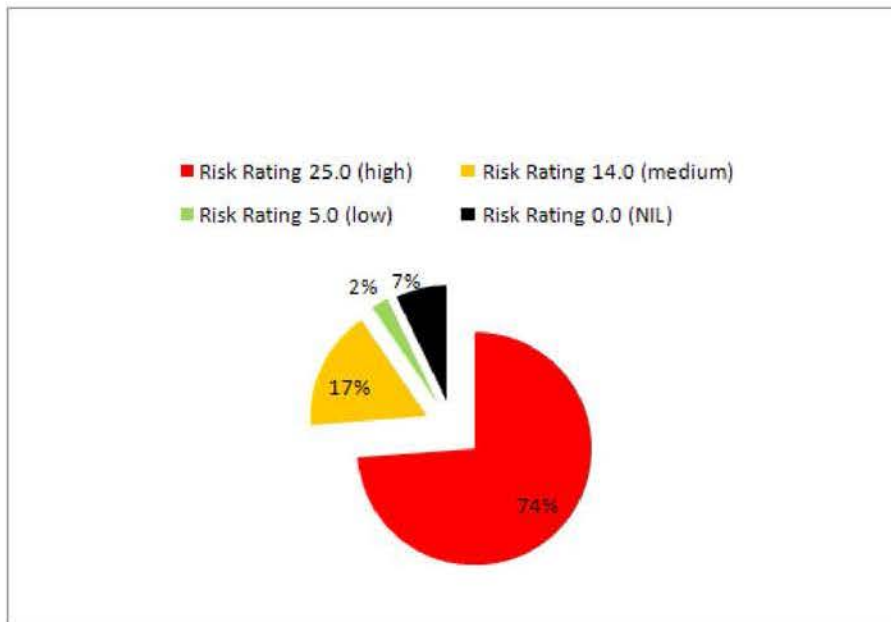
1011 - Period 05 Top 5 Risks

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. (PA 12) Also affects (PA 14)	F McFadden	High (3/1)	All party buy in - application of appendix 7(1)	On Programme	On Programme	31-Dec-11	R Bell
						Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
						Intensive engagement with CEC, palette of options, methodology being agreed	On Programme	On Programme	31-Jul-10	C Neil
						Resolution of trackform at trackform workshop	On Programme	On Programme	31-Aug-10	R Bell
						Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	30-Jul-10	C Neil
						tie developed on-street proposal	On Programme	On Programme	31-Aug-10	S Bell

The risks within the Project Risk Register are categorised below.



The ratings of the risks are illustrated below.



New Risks and Concerns

The Project Risk Manager, in conjunction with the relevant director, agrees which concerns are escalated to risks and are added to the Project Risk Register.

Infraco

The following item was added to the Infraco Concerns Register in the period.

	Risk Num	Cause	Risk Event	Risk description	Effect
Network Rail Section 7	132	Immunsation and/or civils works cause delay to	Network Rail seek to recover cost of associated delays from tie		Additional cost
	133	Late agreement of estimate with New Inglston for future proofing	Wayleave for culvert 2 gas main diversion will not be granted by NIL until design and construction costs agreed for future proofing work. Currently SGN culvert 2 gas main requires to be diverted prior to tram operations.		Delay to programme, extension of time claim. Additional costs.

Risk Action Plan for Next Three Periods

The following treatment plans are due for completion in the next three periods.

Action Owner	Risk ID	Action ID	Action Name	Due	Active	Complete	Late	Next 3 periods
D Sharp	279	634	Fortnightly meetings of Approval Task Force	31/08/2010	Yes	No	No	Period 06
D Sharp	271	559	Assure the quality and timing of submissions	31/09/2010	Yes	No	No	Period 07
D Sharp	271	637	Fortnightly meetings of Approval Task Force	31/08/2010	Yes	No	No	Period 06
F McFadden	931	729	Conflicts register - all on-street sections appart from York Plc and Broughton St	31/08/2010	Yes	No	No	Period 06
F McFadden	1104	700	Utility conflicts being identified Conflicts Register - all on-street sections appart from York Place and Broughton Street	31/08/2010	Yes	No	No	Period 06
F McFadden	1104	701	Following identification of conflicts potential solution such as protection measures to be identified	31/08/2010	Yes	No	No	Period 06
F McFadden	1104	727	Timetable for utility conflicts resolution	31/08/2010	Yes	No	No	Period 06
R Bell	52	726	Design Task Force	31/08/2010	Yes	No	No	Period 06
R Bell	1094	736	Resolution of trackform at trackform workshop	31/08/2010	Yes	No	No	Period 06
S Bell	343	721	Clause 34 / 80.15	31/08/2010	Yes	No	No	Period 06
S Bell	343	722	DRP Mudfa Rev 8 response	31/08/2010	Yes	No	No	Period 06
S Bell	1077	703	Continued DRP / Adjudication Process	31/08/2010	Yes	No	No	Period 06
S Bell	1077	720	PA1 challenge	31/08/2010	Yes	No	No	Period 06
S Bell	1077	724	Siemens 33 initiative to achieve Airport to Bankhead Drive	31/08/2010	Yes	No	No	Period 06
S Bell	1101	707	Legal challenge to Clause 80 and BSCs interpretation thereof	31/08/2010	Yes	No	No	Period 06
S Bell	1101	730	Clause 34/80 issues using DRP for disputed values	31/08/2010	Yes	No	No	Period 06
S Bell	1094	725	tie developed on-street proposal	31/08/2010	Yes	No	No	Period 06
S Clark	1077	704	Contract interpretation and technical expert witness work	31/08/2010	Yes	No	No	Period 06
W Biggins	911	628	Liase with Scottish Power to agree and approve method of crossing tunnel - SDS doing this	31/08/2010	Yes	No	No	Period 06

Cost Quantative Risk Analysis

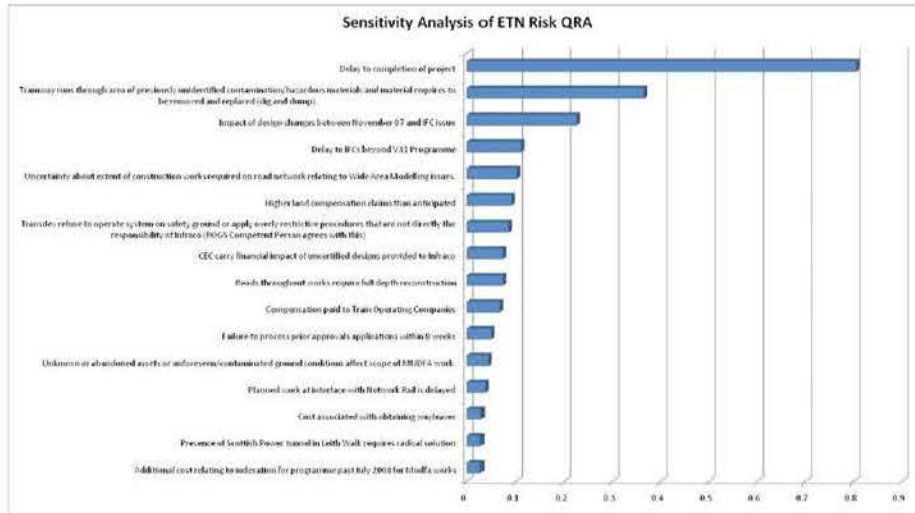
The Project Risk Allowance at financial close was £30,336,196. This was increased in Period 1 by £17,982,993. Drawdowns to the end of Period 5 10/11 now total £47,519,184. The remaining risk balance based on the approved QRA plus the additional funding is £800k.

Risk Drawdown

The following table illustrates the drawdown applications on the project risk and contingency allocations in Period 05.

Description	Owner	Value (£)
Archaeological works Phase 1+2	Mike Paterson	£287,096
Section 7 Ground Improvement Works	Mike Paterson	£530,000
Section 7 Drainage - BDDI-IFC risk	Mike Paterson	£552,845
South Gyle Bridge – Sewer Diversion	David Carnegie	£892,027
Contaminated Ground Russell Road Retaining Wall W4	Mike Paterson	£397,000
TRO Traffic Model	Duncan Fraser	£15,000
Gogarburn Roundabout Lighting	Mike Paterson	£11,149
Gogar Landfill Invasive Species	Mike Paterson	£48,377
WG 2007 Tram promotion	Gregor Roberts	£14,089
Total		£2,747,583

Sensitivity Analysis of Approved Cost QRA



The above chart highlights those component risks which are correlated most closely with the overall risk allocation. These risks are the ones which, if changed in terms of probability or impact, would have the most significant effect on the final output.

Schedule QRA

tie is currently working with the supplier of Active Risk Manager (ARM – the risk management software which **tie** uses) with a view to integrating Primavera and ARM so that a schedule risk

analysis can be developed. A schedule QRA will be created following agreement of the recalibrated programme.

Health, Safety, Quality and Environment

H&S Accidents and Incidents, Near Misses, Other or Initiatives

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	108,714	0	1	1	15	1	3	0	1	0.92	0.92
13 period rolling	1,590,250	1	2	21	210	54	26	7	35	0.19	3.40



There was one reportable accident during Period 5 involving a dumper overturning at the new tram depot. The dumper driver was treated in hospital for a fractured collar bone. The rolling 13 period AFR is 0.19, still below the target of 0.24 for the project. Following this incident **tie** have reviewed the investigation findings supplied by BSC. It was concluded by **tie** that the investigation had not fully identified the underlying causes of the incident. A meeting took place on 5th August at which BSC undertook to further investigate aspects of the incident and resubmit the investigation report.

There was one service strike involving damage to a small water pipe on the Crummock SRU site. The service strike frequency rate across the project still continues on a downward trend. There has been a decrease in reported Member of Public incidents. There was one reported accident involving a cyclist in Princes St. CoCP compliance has increased slightly from 95% to 97% this period. There have been 100% of the planned PM inspections (9) carried out during Period 5 and 120% (6) of planned safety tours.

An Operative and a Machine Operator working for BSC (Barr) were removed from site at the depot after BSC witnessed an operative standing in the bucket of the machine at height. This subcontractors' performance is being reviewed weekly by BSC and Barr.

A **tie**/BSC senior management discussion is still required to close out the Guided Busway RIDDOR incident. Letter sent to BSC citing 9 significant incidents over the past 3 months and request for meeting to discuss a strategy to improve safety management across the project. This was also raised in the BSC Progress Meeting 10th August.

During 2 joint **tie**/BSC site walk-about at the depot, 2 separate incidents of unsafe rail lifting practice were noted. The methods being utilised were linked to the causes identified in the RRV RIDDOR incident in April. **tie** have expressed concern that the measures put in place to prevent reoccurrence of the original incident have not been adequate. **tie** will formally request, through letter and meeting, BSC's proposed action to address this concern.

Environment

3 environmental incidents during Period 5. One at section 7 – Diesel Spill (BSC) and two at Gogar depot – Hydraulic oil leak (BSC) and overfilled generator/diesel spill (Siemens/BAM). All actioned in accordance with procedures.

Formal letter received from BSC regarding the issue of outstanding site drainage plans. Further email correspondence with BSC, providing additional information gave an adequate

response. Site spot checks are being carried out by the **tie** HSQE team to verify that plans are; in place on site, adequate and have been formally communicated to all relevant staff.

Archaeological change for post excavation works approved during Period 5. Discussion to take place during Period 6 in order to determine programme of works. Data Structure Report for works carried out at Constitution Street to be undertaken prior to end of August in order that it is available for review at the hearing regarding the works on the graveyard wall. Cost for report included in post excavation change.

Revision 5 of the BSC Environmental Management Plan received during Period 4. To be formally reviewed and response issued during Period 6.

EN/BSC/ADD1/2010 Audit of BSC Site Waste Management Plans, scheduled 24th August 2010. Addition to schedule as BSC has failed to produce copies of the monthly Site Waste Management Plans in line with the requirements of the COCP.

Deliver a Safe Tram

Section	Activity	Data Checked				
		IDC	ITP's	Design Variation/Change	As Built's	Asset Register
A8 Underpass	Excavation & Piling	0.5	1	1	1	N/A
Lindsay Road	Retaining Wall	0.5	1	1	1	N/A
Depot	Building Fit Out	0.5	1	1	1	N/A
Section 7 Farrans	Track Works/Earthworks	0.5	0.5	1	1	N/A
PD	Total (y)	2	3.5	4	4	N/A
	Max Possible Total (y)	4	4	4	4	N/A
Total	Percentage P4	49%	91%	83%	76%	50%
	Percentage P5	44%	90%	84%	78%	50%

Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)

Assurance submission

tie received interim design assurance statements from BSC on 9th August 2010. The information provided as agreed with **tie** was – interim DAS's for the Civils (SDS) and System (Siemens) packages of designs with the Integrated (BSC) DAS to follow for each geographical section.

The information provided is now subject to a 20 day **tie** review process. As of 13th August, there has been no submittal of BSC IDC information. This has been promised for W/C 16th August.

Princes Street Assurance Check

tie expect to be in a position to form an opinion, based upon evidence that the Design, Construction, Testing and Commissioning of the Princes Street works to date are sound, however, to date this is not the case.

Whilst **tie** representatives may have seen sight of record keeping and documentation, the documentation and information currently being made available to **tie** is mainly in the form of generic procedures and processes. There is very little information provided to assure **tie** that the works in Princes Street have been designed, constructed, tested and commissioned to meet the Employers Requirements.

BSC have formally been asked (7th May 2010) to make Princes Street documentation available for **tie** representatives to review. To date they have not responded to this request and have been prompted formally (8th July 2010) to reply and make their position clear. To date this second response has been ignored. This issue will be escalated.

Deliver a Safe Tram Key Metrics

4 inspections carried out during period – A8 Underpass; Lindsay Road, Depot and Section 7 & Farran's. Slight improvements were noted in the IDC and As Built metrics checks.

Princes Street Audit carried out on the 20th July in order to obtain information for Marshall Poulton Report. 11 findings were noted - 9 Minor - 2 OBS. Report formally sent to BSC for action and CEC for info. Response requested by 13th August 2010. Meeting took place with BSC 13th August 2010 to review actions and agree proposals. Only 5 closed, 6 remain open, date for closure revised.

Audit of CEC/BSC Approvals Process, scheduled to take place 26th August 2010. Full checklist prepared taking cognisance of information received from CEC. Checklist and formal notification of audit sent to BSC. Site Inspection and ITP review to be carried out during Period 6 regarding works at Siemens Broxburn Yard on the OLE's for the ETP.

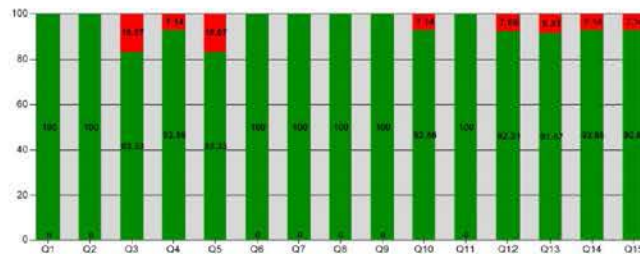
BSC Design Management Plan Issue 3 received - to be reviewed and formal response sent during Period 6.

Action required

Receive BSC's Design Assurance/Cases for Safety submission, allocate resources and review through **tie** SVS process. Trending analysis to be carried out on the Site Supervisors Check sheet and reported during period 6. Technical Audit of CEC approval process to take place 19th August 2010.

COCP Compliance

Period 4



Movement in Period

Compliance has risen from 95% to 97% from Period 4 to Period 5

There has been an improvement in compliance with the following areas:

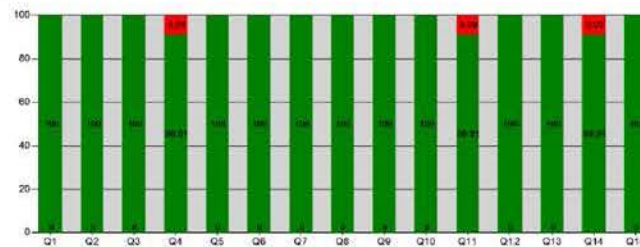
- Notices
- Noise
- Parking

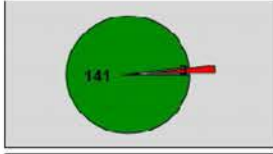
There has been a decreased in non-compliance in the following areas:

- Litter and general housekeeping

Q1. Hours of Work
Q2. Notification
Q3. Notices
Q4. Fencing and Hoarding
Q5. Noise
Q6. Waste Management
Q7. Waste Water and Run-Off
Q8. Water
Q9. Emergency Access
Q10. Parking
Q11. Litter and general housekeeping
Q12. Dust
Q13. Smoking
Q14. Members of the Public
Q15. PPE and Behaviours

Period 5



**tie Action**

- The issues were addressed and closed on site during the inspection.
- HSQE and Construction Director will discuss issues with Project Mangers and disseminate information to sites. They will also highlight where additional measures are required. This month's targets will focus on:
 - Litter and General House Keeping and maintain good standards throughout festival period on all areas of tram project.
- Meeting arranged with CEC Tram coordination Manager and Infraco Director to discuss level of action taken.

Stakeholder and Communications

Media / Press Activity

Following the July Tram Project Board meeting, media coverage regards Edinburgh Trams has remained quiet. A number of stories were published concerning expenses, proposed Traffic Regulation Orders and progress on the project.

We were approached by the Herald to comment on two press release sent to them by the Moray Feus Residents Association regarding their ongoing campaign to reopen Shandwick Place to general traffic. Both articles, one prior to a presentation to City of Edinburgh Council and one following the meeting, were both balanced. The message clearly communicated that this stage of the TRO process is still open to consideration, with decisions due to be taken on various aspects of the proposal.

The Evening News ran a story on a possible mature contractual divorce with our consortium BSC. We were approached for comment and a statement was given on behalf of Richard Jeffrey which explained that key decisions were still to be made in negotiations with the contractor. A minor story was also published on the upcoming tram exhibition being organised for mid-September on Edinburgh's trams past and future as well as covering the total number of visitors to the tram vehicle on Princes Street.

The Herald reported on the 29th July Sainsbury's decision to stop home deliveries during the festival period due to road congestion. The Herald noted that this decision was taken due to ongoing tram works in the city centre. This was in fact incorrect, as we had no work sites in the centre of Edinburgh and The Herald were contacted to dispute this point. A letter was subsequently written to both journalist and editor as a result. We also spoke to Sainsbury's in London who subsequently wrote to all their Edinburgh home shoppers confirming that all arrangements were entirely as normal.

As a result of a Freedom of Information Request the Sunday Herald ran a story on bonuses and expenses, much of this related to the Edinburgh Airport Rail Link project. The article generated further coverage on Monday 9th and Tuesday 10th August in the Scotsman, Evening News and Herald.

In order to clarify our position on the Sunday Herald article a statement was posted on the Edinburgh Trams Facebook site explaining the need for investment in our employees and why the decision was taken to award bonuses on the EARL project. Our statement picked up by the Evening News and published the next day, Tuesday 10th August.

The Media Team were approached by the Edinburgh Chambers of Commerce to write a short editorial piece for their Premier Dinner Series on trams as a stimulus for economic growth. This piece will feature in the Chambers of Commerce magazine and website.

Public Information Planning

Another busy period for the Branding team during Period 5 began with the tram mock up, which is currently situated near the airport terminal building, being fully covered in a vinyl wrap on 23rd July to promote this year's festival season. Signage displaying key messages of the project was also successfully installed at the location of the Edinburgh Airport Tram Stop. The same style of signage will be installed on the Broomhouse Road Bridge over the coming weeks.

The installation of banners onto Princes Street's Overhead Line poles which was reported last period took place on the 26th July. Thirty double-sided, full colour banners were placed along the length of Princes Street to promote the various shows and events available at this year's Edinburgh Festival. The banners were designed and placed in collaboration with each of the Festivals such as City of Literature, Mela, The Fringe and also the City of Edinburgh Council's Super September events.

Planned Haymarket House signage has been updated to include the Council's Economic Development key messages and is due to be installed later in August. Roundels and bunting is being arranged to encourage footfall into the West End during the Festival period, while similar roundels and pavement art is being looked at for Leith Walk and I Love Leith campaign.

Signage for the off street section of the route is also being developed following a site visit at Ingliston Park and Ride. The opportunity to attach a number of banners to lamp posts in the car park area to heighten the profile and awareness of the tram stop and project as a whole. A small number will be attached to begin with the idea being that this will increase over time.

Partner and Stakeholder Communications

During Period 4 a series of work notifications were delivered to local business and residents for works in the north and west of the city:

- Carrick Knowe Weekend possessions for bridge work - 150
- Baird Drive Tram Works - 1153
- Roseburn Street Drainage and Viaduct work – 450
- Haymarket Yards Tram Works - 150

Ongoing meetings have been taking place between stakeholders in the Haymarket Yard area with our Customer Relations Manager in order to keep them informed of the upcoming traffic diversion around Rosebury House while tram works are carried out along the Haymarket Yards road. The businesses that we regularly meet include Tesco Bank, HM Revenue and Customs, the Institute of Chartered Accountants and Surveyors, Youthlink, Network Rail, COSLA, Halifax-Bank of Scotland and Colliers building managers.

Work is due to commence on construction of an embankment at Baird Drive to accommodate the tram route. Due to this work taking place close to residences along Baird Drive, extensive meetings and notifications have been held with residents to keep them informed of what will be involved in this, phase of the works. Due to amount of work due to begin in the Murrayfield area, a new stakeholders group has been formed to help air any issues or communicate information easier.

The next phase of the school programme is currently being prepared. The new programme will include different options for the schools to choose from such as general update presentations to the school, Tramformer information material and the Trambassador scheme which would see Primary 6 students become involved in site visits and reporting back on the project to their classes and assemblies.

Planning has begun for a mobile Edinburgh Trams exhibition which will take place on the first Tram Vehicle currently situated on Princes Street. The exhibition will showcase photos and memorabilia and a timeline of tram in Edinburgh from the first trams to now and the construction of Line 1a. The exhibition is scheduled for mid September and items to be shown are currently being procured from a number of sources.

Communication continues on a regular basis between businesses and residents to keep them informed of the progress being made on the project and of any works due to commence in their area. The following stakeholder group meetings were attended by a member of the Communications and Customer Service team:

- Baird Drive Residents Association
- Dublin Street Residents Association
- Elm Row Traders
- Haymarket Yards stakeholders
- Leith Walk Traders

Website / Internet Communications

The Edinburgh Trams website, Facebook and Twitter pages are important channels for informing the public of announcements, notifications and initiatives.

Our Facebook fans continue to increase every Period with the latest figure sitting at 759. Facebook has evolved into a useful tool for discussion of key issues or areas of interest on the project. Content on the Facebook has also been expanded to not only include updates for works sites, but to inform the public of inaccurate press coverage and exciting developments on the project. Twitter has seen a jump in followers also in only four weeks from 809 to 875 and is used mainly to monitor forum discussions on the project and also to automatically send out the posts from Facebook.

Social media activity remains an important tool for drawing users to the site. While social media links are a popular entry point for www.edinburghtrams.com there is a high incidence of users subsequently browsing information thereafter, typically checking local updates before leaving. These components are an essential part of the user journey into more detailed information on the project and have the greatest overall impact on site traffic. "Local Updates" on construction work, traffic management and the route alignment remain in first place for RSS alerts this period.

Freedom of Information Requests

A total of ten Freedom of Information requests were open at the beginning of Period 5, seven of which were new FOI requests while three were with the Scottish Information Commissioner. Of the ten FOI enquiries seven were completed and three carried over to Period 6. All requests from the Scottish Information Commissioner were completed.

Customer Service Activity

The total number of enquiries logged by the Customer Service team has dropped by 24 during Period 5 in comparison to Period 4 where 291 contacts were recorded. Period end totals have continued to fluctuate between 300 and 260 consistently over the past four months. A comparison of weekly totals between Period 4 and 5 also highlights an emerging steady trend in low totals around 70 each week. The majority of correspondence was received via Email during Period 5, with 152 enquiries being logged. Letters (5), Meetings (19) and Phone calls (90) totals all dropped over the last four weeks; however Phone calls still received a large volume of enquiries.

Information Requests logged a total of 233 enquiries during Period 5 again the majority of all incoming enquiries. These requests concerned a wide range of issues such as road closures, utility works and concessionary passes. Complaints fell steeply from last period to 3 recorded issues concerning noise from our works, fencing that needs repaired and congestion at the West End. COCP Complaints however remained high with 10 recorded complaints regarding a flooded basement and damage to on street railings. The remaining correspondence was split between the following Subjects: Business Support (3), Insurance Claims (4), Employment (8) and Positive Comments (6).

Customer Service Figures
a) Transport Scotland - Monthly Customer Service Report 19/07/2010 - 13/08/2010

Item	Volume Month	Volume (Cumulative from 21/11/08)	Performance (Month)	Performance (Cumulative)	Target Performance
Telephone response	104	4833	89	96	90% in 30 seconds
Telephone Same day resolution	101	4644	97	96	Info only
Email acknowledgement	121	2970	100		100% acknowledged within 24 hours
Email response			100	99	90% resolution in 7 days
Email same day resolution	102	2712	89	91	Info only
Letter acknowledgement	1	199	100		100% acknowledgement within 24 hours
Letter response			100	96	100% resolution in 7 days
Total Enquiry Volumes	226	8002			
Website update	6	1587	100	100	Weekly

b) Out of Standard/Work in Progress statement at month end 16 Jul 2010

		Volume of WIP @ m/end	Oldest date	Oldest Issue	Handled By
M/e 13 Aug 2010	Email	1	13/08/10	Help with university project	Mike Connelly
	Letters	0	N/A	N/A	N/A
	Calls	0	N/A	N/A	N/A

c) Monthly Notifications Performance 19/07/2010 to 13/08/2010 and Cumulative from 21 November 2008

0 Major notifications
 4 Minor notification – 3 in standard and 1 out of standard
 0 Emergency notifications

Notification Type	Work Site		Notifications	% in Standard
Major works	Month	Notifications	0	
		In Standard	N/A	N/A
	Cumulative	Notifications	15	
		In Standard	6	67
Minor Works	Month	Notifications	4	
		In Standard	3	60
	Cumulative	Notifications	202	
		In Standard	166	82
Emergency	Month	Notifications	0	
		In Standard	N/A	N/A
	Cumulative	Notifications	14	
		In Standard	14	100

Section	Activity	Data Checked				
		IDC	ITP's	Design Variations/Change	As Built's	Asset Register
A8 Underpass	Excavation & Piling	0.5	1	1	1	N/A
Lindsay Road	Retaining Wall	0.5	1	1	1	N/A
Depot	Building Fit Out	0.5	1	1	1	N/A
Section 7 Farrans	Track Works/Earthworks	0.5	0.5	1	1	N/A
PD	Total (y)	2	3.5	4	4	N/A
	Max Possible Total (y)	4	4	4	4	N/A
Total	Percentage P4	43%	91%	83%	76%	50%
	Percentage P5	44%	90%	84%	78%	50%

Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)

1.0 Assurance

Assurance submission

- **tie** received interim design assurance statements from BSC on 9th August 2010. The information provided as agreed with **tie** was – interim DAS's for the Civils (SDS) and System (Siemens) packages of designs with the Integrated (BSC) DAS to follow for each geographical section.
- The information provided is now subject to a 20 day **tie** review process. As of 13th August, there has been no submittal of BSC IDC information. This has been promised for W/C 16th August.

Princes Street Assurance Check

- **tie** expect to be in a position to form an opinion, based upon evidence that the Design, Construction, Testing and Commissioning of the Princes Street works to date are sound, however, to date this is not the case.
- Whilst **tie** representatives may have seen sight of record keeping and documentation, the documentation and information currently being made available to **tie** is mainly in the form of generic procedures and processes. There is very little information provided to assure **tie** that the works in Princes Street have been designed, constructed, tested and commissioned to meet the Employers Requirements.
- BSC have formally been asked (7th May 2010) to make Princes Street documentation available for **tie** representatives to review. To date they have not responded to this request and have been prompted formally (8th July 2010) to reply and make their position clear. To date this second response has been ignored.

2.0 Deliver a Safe Tram Key Metrics

- 4 inspections carried out during period – A8 Underpass; Lindsay Road, Depot and Section 7 & Farran's. Slight improvements were noted in the IDC and As Built metrics checks.
- Princes Street Audit carried out on the 20th July in order to obtain information for Marshall Poulton Report. 11 findings were noted - 9 Minor - 2 OBS. Report formally sent to BSC for action and CEC for info. Response requested by 13th August 2010. Meeting scheduled to take place with BSC 13th August 2010 to review actions and agree proposals. Formal response will follow on from this meeting.
- Audit of CEC/BSC Approvals Process, scheduled to take place 26th August 2010. Full checklist prepared taking cognisance of information received from CEC. Checklist and formal notification of audit sent to BSC.
- **tie** HSQE to oversee Site Release walk round on all areas affected by the summer embargo, reports will be compiled for all areas and formally recorded on HSQE system. Procedure formally issued to BSC. BSC have advised and will review and amend, updating their ITP where applicable.
- Site Inspection/Audit of the Galvanising Works for the SRU (Crummock) to take place during Week 4; Period 5. Formal report to be developed and issued to Crummocks.
- Site Inspection and ITP review to be carried out during Period 6 regarding works at Siemens Broxburn Yard on the OLE's for the ETP.
- BSC Design Management Plan Issue 3 received - to be reviewed and formal response sent during Period 6.
- Completion pack information received for works carried out by Farrans at Section 1A. As built drawings formally issued to BSC and SDS. Meeting held with Clancy Dowcra 6th August 2010 to agree Schedule of Works for outstanding documentation. As Built drawings for Clancy Dowcra formally issued to BSC and SDS. **tie** believe that as built/red line information for all utility areas has now been issued to BSC.
- CEC have raised concerns with the positions of the OLE bases at the Haymarket Viaduct. **tie** requested that BSC provide confirmation that they are as per CEC requirements or state where and why there are differences

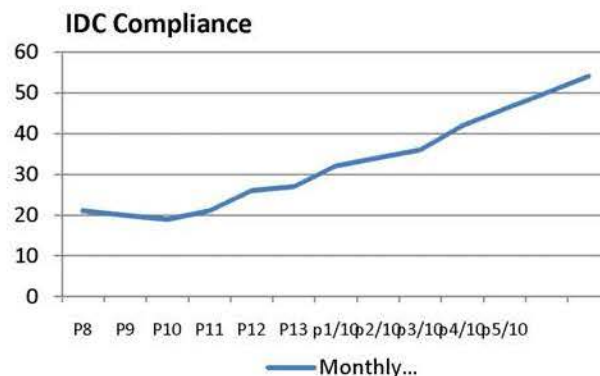
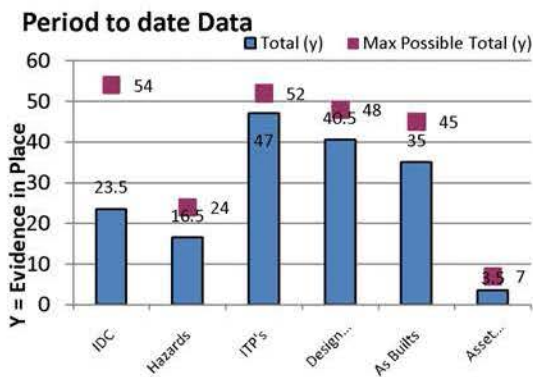
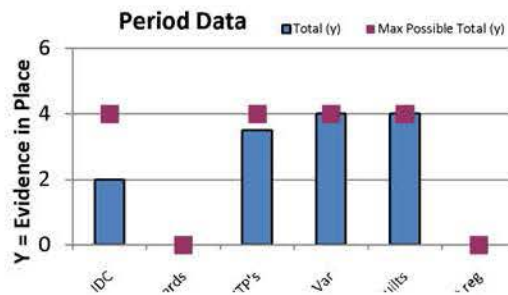
3.0 Site Supervisors Inspection

- 5 Site Supervisors Inspections carried out during Period 5
- Each supervisor is requested to carry out one inspection per period. All results are recorded/collated by the HSQE Team. The findings will provide details of areas requiring improvement, and areas where the contractor is performing well
- The trending graph depicts Period 4 and Period 5, detailing the percentage compliance for each area inspected. The graph will produce more meaningful data as time progresses, but already highlights were improvements are being made, namely Drawings and Design.



4.0 Deliver a Safe Tram – Required Action

- Receive BSC's Design Assurance/Cases for Safety submission, allocate resources and review through tie SVS process.
- Trending analysis to be carried out on the Site Supervisors Check sheet and reported during period 6.
- Technical Audit of CEC approval process to take place 19th August 2010.
- Map ER's to "The Right Thing" exercise



HS&E ACCIDENTS and INCIDENTS SUMMARY

Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	108,714	0	1	1	15	1	3	0	1	0.92	0.92
13 period rolling	1,590,250	1	2	21	210	54	26	7	35	0.19	3.40
BSC											
Period	78,877	0	1	1	6	0	2	0	1	1.27	0.00
13 period rolling	1,027,218	0	2	14	86	19	12	2	16	0.19	1.85
Other Tram including MUD2											
Period	8,564	0	0	0	7	1	1	0	0	0.00	11.68
13 period rolling	177,140	1	0	3	93	19	12	4	10	0.56	10.73



EXECUTIVE SUMMARY

- There was one reportable accident during Period 5 involving a dumper overturning at the new tram depot. The dumper driver was treated in hospital for a fractured collar bone. See Appendix A for further details.
- The rolling 13 period AFR is at 0.19, still below the target of 0.24 for the project.
- There was one service strike involving damage to a small water pipe on the Crummock SRU site. The service strike frequency rate across the project still continues on a downward trend.
- There has been a decrease in reported Member of Public incidents. There was one reported accident involving a cyclist in Princes St. See MOP section for further details
- CoCP compliance has increased slightly from 95% to 97% this period.
- There have been 100% of the planned PM inspections (9) carried out during Period 5 and 120% (6) of planned safety tours.
- An Operative and a Machine Operator working for BSC (Barr) were removed from site at the depot after BSC witnessed an operative standing in the bucket of the machine at height. This subcontractors' performance is being reviewed weekly by BSC and Barr.
- A tie/BSC senior management discussion is still required to close out the Guided Busway RIDDOR incident. – Original letter not sent to BSC; letter now sent citing 9 significant incidents and request for meeting to discuss a strategy to improve safety management across the project. This was also raised in the BSC Progress Meeting 10th August.
- Formal letter received from BSC regarding the issue of outstanding site drainage plans. Further email correspondence with BSC, providing additional information gave an adequate response. Site spot checks are being carried out by the tie HSQE team to verify that plans are; in place on site, adequate and have been formally communicated to all relevant staff.

Deliver the Tram Safely

Company Report – Period 5 10/11

HS&E INSPECTIONS SUMMARY (a summary of significant inspection findings can be found in appendix B)

Project Running Totals	HS&E Tours	HS&E PM Inspection
Number planned	5	9
Number achieved	6	9

HSQ&E KEY ACHIEVEMENTS

- Site Supervisors check sheet being used and proving a good monitoring tool.
- Successful set up of South Gyle Access sewer diversion works contract by Barhale Ltd
- Successful completion of visi-rail and kerbing in preparation for festival and removal of TM
- Successful completion of M.U.D. operations in city centre prior to festival.

KEY ISSUES – POINTS TO NOTE

- During 2 joint **tie**/BSC site walk-about at the depot, 2 separate incidents of unsafe rail lifting practice were noted. The methods being utilized were linked to the causes identified in the RRV RIDDOR incident in April. **tie** have expressed concern that the measures put in place to prevent reoccurrence of the original incident have not been adequate. **tie** will formally request, through letter and meeting, BSC's proposed action to address this concern.
- Following the recent RIDDOR on 20 July 2010 **tie** have reviewed the investigation findings supplied by BSC. It was concluded by **tie** that the investigation had not fully identified the underlying causes of the incident. A meeting took place on 5th August at which BSC undertook to further investigate aspects of the incident and resubmit the investigation report.
- During an asbestos survey, there was an incident resulting in the tripping of 4 NWR track circuits. BSC investigation report has identified that their asbestos contractor exceeded the scope of his works and that there the supervision was inadequate. NWR have approved asbestos removal measures, however, application for 14 day waiver from HSE was initially rejected due to the supply by BSC of inadequate information to HSE.
- Briefing by HSQE given to Barhale operatives and staff on the South Gyle Access works contract including CoCP, Handover Procedure and **tie** Incident Procedure. **tie** have carried out checks on CDM compliance, including welfare provision and deemed the arrangements to be satisfactory. A **tie** Safety Tour identified that although briefings had been undertaken, site management were not fully aware of past project risks and incident reporting. Further briefings and monitoring will take place. The tour also identified a good level of general H&S understanding.
- **tie** have identified that some of Graham's plant operatives at Haymarket yards and viaduct sites required additional training in quick hitch and slew restrictors and re-briefing on safe systems of work when operating adjacent to NWR property. **tie** has asked BSC for a report on proposals to address these issues. – this training has now been completed.

SIGNIFICANT RISKS FOR THE NEXT PERIOD

RISK	ACTION
<ul style="list-style-type: none"> • Piling operations close to a vulnerable cast iron gas main in Russell Road. • NR possessions by Siemens will continue in Periods 5 & 6. • Continued ramping up of resources & contractors in depot area. • Commencement of tunneling operations of new contract for diversion of sewer at South Gyle Access • Rail installation at Depot and Edinburgh Park Bridge • Immunisation works ongoing at railway corridor with continuing asbestos surveys on NWR assets • Leak at 600 twin water main crossing adjacent to depot. SW need to address before Edinburgh gateway commences • Installation/receipt of Depot equipment 	<ul style="list-style-type: none"> • BSC are engaging an independent consultant to provide assurance on the protection of the existing gas apparatus prior to submission to tie and SGN • tie third party rep and NR interface/possession meetings continuing. • BSC interface meetings ongoing. Joint inspections with tie ongoing • HSQE have reviewed all pre-contract start submissions by Barhale. Detailed discussion to take place prior to commencing tunnelling • BSC introduced safe systems of work for rail installation & are in control of all access arrangements for different areas of site. • All WPP continue to be signed off by tie & interfaces with NWR equipment to be monitored. NWR have indicated that they will increase vigilance in the immunisation works • SW to action in line with tie requirements • tie to challenge coordination arrangements and monitor

ENVIRONMENTAL SUMMARY

List any significant environmental events, initiatives, breaches etc

- 3 environmental incidents during Period 5. One at section 7 – Diesel Spill (BSC) and two at Gogar depot – Hydraulic oil leak (BSC) and overfilled generator/diesel spill (Siemens/BAM). All actioned in accordance with procedures.
- BSC currently not mitigating Invasive Species in line with the requirements of the CoCP. - **tie** have written to BSC on several occasions, every few weeks for the last 2 months. SS raised this with Susan Clark and Frank McFadden at risk meeting. **tie** have had TCM in for a meeting to alleviate BSC concerns and have subsequently re-treated areas where BSC believe the treatment has not worked. Following this treatment **tie** have written to BSC again advising that they can work in the area and that they should mitigate all other invasive species in line with their project plan.
- Formal letter received from BSC regarding the issue of outstanding site drainage plans. Further email correspondence with BSC, providing additional information provided an adequate response. Site spot checks to be carried out by **tie** HSQE team to ensure plans are in place on site, are adequate for site requirements and have been formally communicated to all relevant staff.
- Archaeological change for post excavation works approved during Period 5. Discussion to take place during Period 6 in order to determine programme of works. Data Structure Report for works carried out at Constitution Street to be undertaken prior to end of August in order that it is available for review at the hearing regarding the works on the graveyard wall. Cost for report included in post excavation change.
- Revision 5 of the BSC Environmental Management Plan received during Period 4. To be formally reviewed and response issued during Period 6.
- EN/BSC/03/2010 Audit Section 7 Gogarburn Bridge carried out 27/7/2010. Four findings were identified, 3 minor and 1 observation. All findings addressed by BSC and formally closed by **tie**.
- EN/BSC/ADD1/2010 Audit of BSC Site Waste Management Plans, scheduled 24th August 2010. Addition to schedule as BSC has failed to produce copies of the monthly Site Waste Management Plans in line with the requirements of the COCP.
- Formal response to be collated and sent to CEC regarding the replanting of the tree bank along the tree route.

BEST PRACTICE

List any significant quality events, initiatives, breaches etc

- Meeting held with Barhale to discuss hand-over and site release; Documentation will be delivered in line with **tie** procedures.
- Good use of local exhaust ventilation being utilised at Depot – insitu test confirms that respiratory protection not required.
- Grahams have developed a record sheet for recording daily checks on slew restrictors for all plant in the railway corridor.
- BSC personnel have received bespoke training from an independent CPCS trainer on the safe use and operation of dumper training. This will assist in ensuring that the right plant is used by the right person in the right way.
- Scottish Water access transfer procedures - PM's re-briefed on the process to ensure compliance with SW requirements.

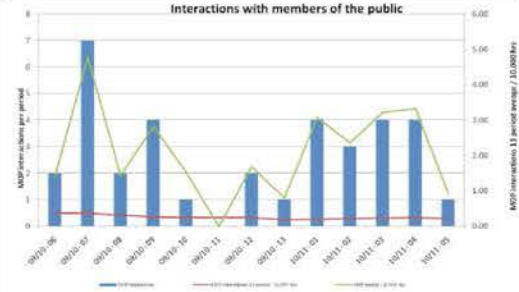


MEMBER OF PUBLIC INTERACTION SUMMARY

List any significant interactions with members of the public, including RTA's, alleged incidents

There has been a decrease in the number of alleged MOP incidents recorded for during Period 5

- 1 report of a cyclist accident in Princes St. involving the Tram tracks.
- Tie release inspection forms have been logged onto GIS by area to assist in confirming areas released back to CEC and classed as safe.

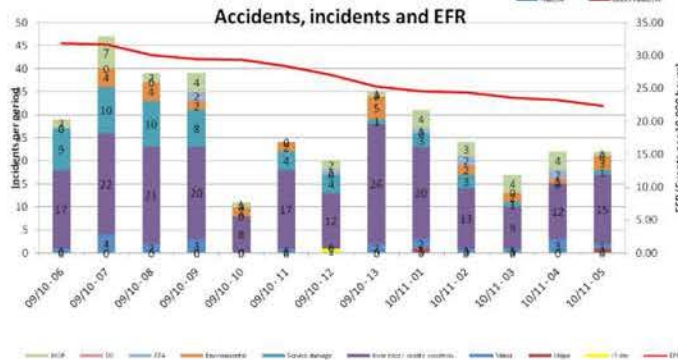
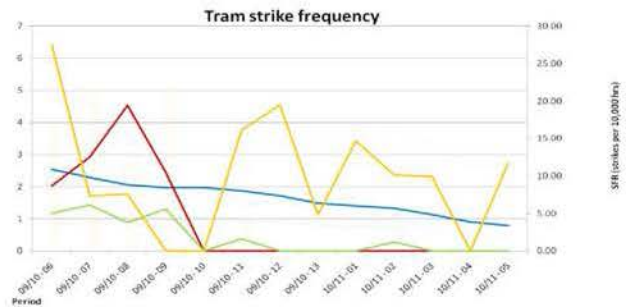


CDM Compliance

List any significant quality events, initiatives, breaches etc

- Approved Contractor List – no additions to tie approved list since last report
- Road 7 & 8 will be complete when the Section 1A MUD works (Farrans) as-built drawing are reviewed and accepted.
- South Gyle Access sewer diversion – Barhale have been advised on tie CDM requirements. CDM inspections have been carried out and these confirmed that welfare arrangements meet the required regulatory standard.
- With the leaving of Paul Colquhoun and the replacement with Colin Happer, tie are taking this opportunity to review the CDM procedures and application of such. An initial assessment summary will be available by mid P6

GRAPHS



APPENDIX A

SIGNIFICANT ACCIDENT / INCIDENT

AIIR Ref:	AIIR01311	Significant/Serious:	Yes	Action taken by tie (if required): Tie request that if BSC have not already done so – BSC were to ensure the removal of the operative and the machine operator Formal review of BSC investigation findings by tie.
Contr Ref:		Description:		
Project	Infraco	Site operatives form SGL (Barr Sub Contractor) observed in the bucket of 360 excavator, at height, placing a string line.		
Location:	Shandwick Place at Hope St			
Date & Time	19/07/10 12:00 pm			
A/I type: <small>See list below</small>	Near Miss/Unsafe Condition	Action taken by Contractor:		
tie PM:	Andy Scott	Barr placed SGL on a watch list and are reviewing their performance each week.		
Contractor:	BSC	Operative and Machine man have been removed from site		

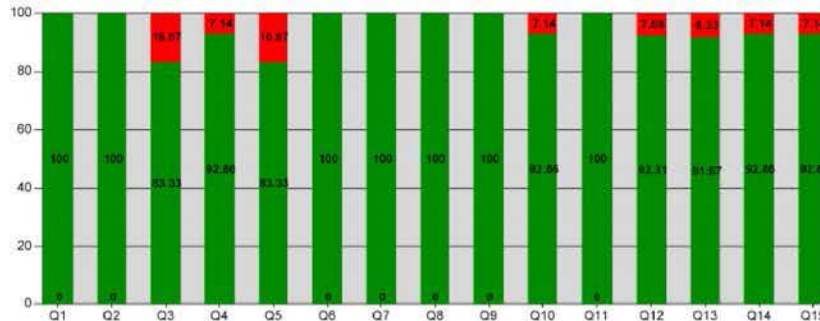
AIIR Ref:	AIIR01310	Significant/Serious:	Yes	Action taken by tie (if required): Formal review of BSC investigation findings has shown the report/investigation to be lacking in the identification of immediate and underlying causes. Meeting held with BSC on 5 th August and BSC to submit additional info. Issue also raised at Progress Meeting on 10 th August.
Contr Ref:		Description:		
Project	Infraco	Site operatives form SGL (Barr Sub Contractor) caused a 6T dumper to tip over during operations. Operative was wearing seat belt.		
Location:	Depot			
Date & Time	20/07/10 09:25 am			
A/I type: <small>See list below</small>	Major (RIDDOR)	Action taken by Contractor:		
tie PM:	Andy Scott	Operative complained of pain to shoulder and back and was sent to Hospital for a check-up. Operative diagnosed with broken collar bone and released from hospital. BSC H & S manager attended site shortly after incident and spoke to injured operative. BSC are carrying out full investigation.		
Contractor:	BSC			

AIIR Ref:	AIIR01327	Significant/Serious:	Yes	Action taken by tie (if required): PJC emailed BSC H&S raising concerns why lessons from previous RIDDOR incident in April 2010 had not been learned. Issue raised at BSC progress meeting on 10 th Letter to be sent to BSC
Contr Ref:		Description:		
Project	Infraco	During joint tie/BSC site visit, an intervention was made to stop an unsafe lifting practice involving the use of a log grab to lift a rail.		
Location:	Gogar Depot			
Date & Time	28/07/10			
A/I type: <small>See list below</small>	Near Miss/Unsafe Condition	Action taken by Contractor:		
tie PM:	Andy Scott	Action being taken to ensure compliance with Method Statements for rail lifting.		
Contractor:	BSC			

AIIR Ref:	AIIR01328	Significant/Serious:	Yes	Action taken by tie (if required): Concerns over BSC's safety management being formally raised by tie Issue raised at BSC progress meeting on 10 th Letter to be sent to BSC
Contr Ref:		Description:		
Project	Infraco	During joint tie/BSC site visit, an intervention was made to stop an unsafe lifting practice involving the use of chains to lift rail.		
Location:	Gogar Depot			
Date & Time	05/08/10			
A/I type: <small>See list below</small>	Near Miss/Unsafe Condition	Action taken by Contractor:		
tie PM:	Andy Scott	Investigating why lessons from near miss identified during the previous week had not been learned. Action being taken to ensure compliance with Method Statements for rail lifting .		
Contractor:	BSC			

APPENDIX B – COCP INSPECTIONS

Period 4



Movement in Period

Compliance has risen from 95% to 97% from Period 4 to Period 5
 There has been an improvement in compliance with the following areas:

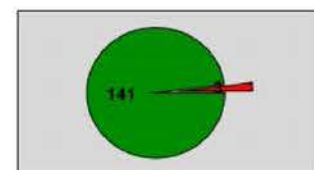
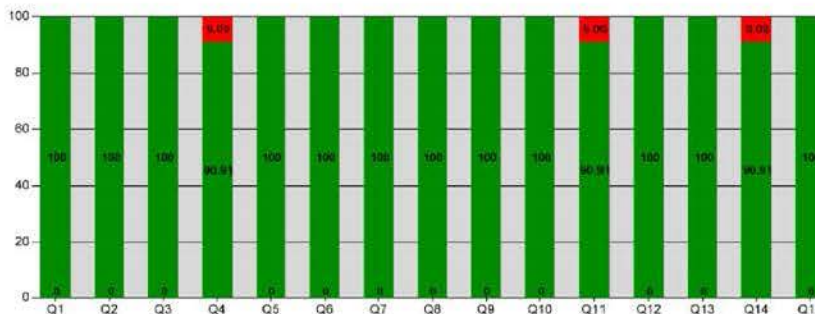
- Notices
- Noise
- Parking

There has been a decreased in non-compliance in the following areas:

- Litter and general housekeeping

Q1. Hours of Work
Q2. Notification
Q3. Notices
Q4. Fencing and Hoarding
Q5. Noise
Q6. Waste Management
Q7. Waste Water and Run-Off
Q8. Water
Q9. Emergency Access
Q10. Parking
Q11. Litter and general housekeeping
Q12. Dust
Q13. Smoking
Q14. Members of the Public
Q15. PPE and Behaviours

Period 5



tie Action

- The issues were addressed and closed on site during the inspection.
- HSQE and Construction Director will discuss issues with Project Mangers and disseminate information to sites. They will also highlight where additional measures are required. This month's targets will focus on:
 - Litter and General House Keeping and maintain good standards throughout festival period on all areas of tram project.
- Meeting arranged with CEC Tram coordination Manager and Infracore Director to discuss level of action taken